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INTELLIGENT TRANSPORTATION SYSTEMS STATEWIDE ARCHITECTURE







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Research Report

KTC-03-08 / SPR188-98-2F

INTELLIGENT TRANSPORTATION SYSTEMS STATEWIDE ARCHITECTURE (Final Report)

by

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in cooperation with

Kentucky Transportation Cabinet

Commonwealth of Kentucky

and

Federal Highway Administration U.S. Department of Transportation

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1. Report Number KTC-03-08 / SPR188-98-2F	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle		5. Report Date June 2003	
Intelligent Transportation Systems Statewide Architecture (Final Report)		6. Performing Organization Code	
7. Author(s) J.D. Crabtree and J.R. Walton		8. Performing Organization Report No. KTC-03-08 / SPR188-98-2F	
9. Performing Organization Name and Address		10. Work Unit No.	
Kentucky Transportation Center College of Engineering University of Kentucky Lexington, Kentucky 40506-0281		11. Contract or Grant No. KYSPR-98-188	
12. Sponsoring Agency Name and Address Kentucky Transportation Cabinet		13. Type of Report and Period Covered	
State Office Building Frankfort, Kentucky 40602		14. Sponsoring Agency Code	
15 Supplementary Notes			

15. Supplementary Notes

Prepared in cooperation with the Kentucky Transportation Cabinet and the Federal Highway Administration

16. Abstract

This report describes the development of Kentucky's Statewide Intelligent Transportation Systems (ITS) Architecture. The process began with the development of an ITS Strategic Plan in 1997-2000. A Business Plan, developed in 2000-2001, translated the goals of the Strategic Plan into specific project recommendations. To develop the Statewide Architecture, the project team first inventoried all existing and planned ITS projects in the state. A project architecture was developed for each identified project, and these project architectures were then merged to form the Statewide Architecture. This report describes the background work that set the stage for the architecture, the actual architecture development process, and some of the key issues and challenges faced during the development. In addition, this report provides a description of the actual deliverables that resulted from the architecture development.

17. Key Words Intelligent Transportation Systems Business Plan, Architecture, Strates		18. Distribution S Unlimited, with Transportation Ca	n approval of	the Kentucky
19. Security Classification (report)	20. Security Clas page)	ssification (this	21. No. of Pages 160	22. Price

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EXECUTIVE SUMMARY

In 1997, the Kentucky Transportation Cabinet recognized the need for vision and strategic planning with respect to the deployment of Intelligent Transportation Systems (ITS). In response to this need, the Transportation Cabinet initiated a project through the Kentucky Transportation Center (at the University of Kentucky) to develop an ITS Strategic Plan for Kentucky. As the project progressed, it expanded to include the development of an ITS Business Plan and a Statewide ITS Architecture.

The ITS Strategic Plan was prepared in two phases. The first phase focused on the functional areas of Advanced Traveler Information Systems, Advanced Rural Transportation Systems, and Commercial Vehicle Operations. The second phase focused on Advanced Traffic Management Systems, Advanced Public Transportation Systems, and Advanced Vehicle Safety Systems. The final report for the ITS Strategic Plan was published in June 2000. The report included an inventory and map of existing ITS projects in Kentucky, with a one-page description for each project. The report also presented a mission statement, a vision, and a set of goals for each functional area of ITS. Finally, the Strategic Plan included brief discussions of Public Relations and Marketing, Operations and Maintenance, and Organizational Structure.

The purpose of the ITS Business Plan was to take the goals presented in the Strategic Plan and translate them into specific project recommendations. As with the Strategic Plan, the Business Plan development depended heavily on stakeholder involvement. The National ITS Architecture was a key tool in the process. As a starting point in developing a list of projects for the Business Plan, the goals defined in Kentucky's Strategic Plan were mapped against the 63 (there are now 75) market packages in the National Architecture, to determine which market packages were applicable to meeting Kentucky's goals. This process identified 50 market packages that were necessary to achieve all of the goals in the Strategic Plan. Through an iterative process involving project staff and stakeholders, priorities were assigned and the list was pared down to 16 market packages for inclusion in the Business Plan. From these market packages, a list of specific project recommendations was developed. The resulting list was included in the Business Plan Final Report, which was published in September 2001. That report included an inventory of current ITS deployment in Kentucky, a discussion of ITS infrastructure considerations, and descriptions of 21 recommended projects. For each recommended project, the report included an objective, a project description, the recommended location(s), the anticipated cost, and the recommended implementation schedule. Also included, where appropriate, was a map of the recommended location(s).

In early 1999, members of the Kentucky Transportation Cabinet's ITS Team determined that Kentucky needed to develop a Statewide ITS Architecture. The Architecture development was added, as a new task, to the existing Strategic/Business Plan project. One of the early challenges was determining what such an architecture should "look like." At that time, there was very little guidance available on how to prepare a regional ITS architecture. Three significant decisions that were made early in the project were: (1) to build the architecture at the project level first, and then merge these project architectures into a regional architecture; (2) to use market packages (and market package diagrams) as the primary "communications and documentation" tool for development of project architectures; and (3) to use the Turbo Architecture software for building and merging the architectures.

With these decisions made, development of the ITS Architecture for Kentucky began, using the inventory of projects that was included in the ITS Strategic Plan. Individual project architectures were prepared for every project on the list. For some major projects, a project architecture (or regional architecture) was already in existence or was being prepared by a private sector firm. In most cases, however, the project architecture had to be developed "from scratch." The process for developing these project architectures typically involved the following steps:

- 1. Identify and interview stakeholders to assist in defining the scope and details of the project.
- 2. Prepare market package diagrams to match the project definition.
- 3. Review the market package diagrams with stakeholders to verify their accuracy, and make changes as needed.
- 4. Create a project architecture using the Turbo Architecture software, based on the final market package diagrams.

The Architecture needed to reflect planned projects as well as existing projects. Thus, the above process was carried out not only for existing projects, but also for the recommended projects in the ITS Business Plan.

Once the project architectures had been completed, they needed to be reviewed and compared for consistency before being merged. Since some of the project architectures were developed by project staff and some were developed by private sector firms, there were differences, and it was necessary to make changes to the architectures to bring them into conformity.

Once the changes had been made and the project architectures were consistent with one another, the project architectures were merged into a "regional" (i.e., Statewide) architecture. This was a straightforward process, accomplished using the "merge" feature of the Turbo Architecture software.

ACKNOWLEDGEMENTS

The following individuals contributed greatly to the successful completion of this project through their service on the Study Advisory Committee.

Nancy Albright, Kentucky Transportation Cabinet, Division of Operations, ITS Branch Al Alonzi, Federal Highway Administration

Glenn Anderson, Kentucky Transportation Cabinet, Division of Operations, ITS Branch

Rob Bostrom, Kentucky Transportation Cabinet, Division of Multimodal Programs

Don Breeding, Kentucky Transportation Cabinet, District 11

Rodney Brewer, Kentucky State Police

Simon Cornett, Kentucky Transportation Cabinet, Division of Traffic

John Crossfield, Kentucky Transportation Cabinet, Division of Operations, ITS Branch

Charlie Cunningham, Kentucky Transportation Cabinet, Division of Operations, ITS Branch

Brad Hamblin, Kentucky Transportation Cabinet, Division of Construction

Ruth Hawkins, Kentucky Transportation Cabinet, Office of Public Affairs

Ron Herrington, Lexington-Fayette Urban County Government, Division of Traffic Engineering

Glenn Jilek, Federal Highway Administration

Mike Kuzmich, Transit Authority of River City

Bob Lewis, Kentucky Transportation Cabinet, Division of Construction

Cliff Linkes, Kentucky Transportation Cabinet, District 7

Ed Logsdon, Kentucky Transportation Cabinet, Department of Vehicle Regulation

Ted Noe, Kentucky Transportation Cabinet, Division of Planning

Bob Nugent, Transit Authority of River City

Brent Sweger, Federal Highway Administration

Leon Walden, Kentucky Transportation Cabinet, Division of Operations, ITS Branch

In addition, the following individuals provided substantial assistance in defining projects and/or developing individual project architectures.

Tim Adams, Kentucky Transportation Cabinet, Division of Motor Carriers

Mark Bell, Kentucky Transportation Cabinet, Division of Motor Carriers

Jeff Bibb, Kentucky Transportation Cabinet, Division of Vehicle Enforcement

Monica Barrett, Kentucky Transportation Center

Hal Daniel, TRW, Inc.

Erin Ehlinger, PB Farradyne

David Hunsucker, Kentucky Transportation Center

Barney Leslie, TRW, Inc.

Jerry Pigman, Kentucky Transportation Center

Jim Ramsey, Kentucky Transportation Cabinet, Office of Technology

Rick Taylor, Kentucky Transportation Cabinet, Division of Motor Carriers

Chip Wiesman, TRW, Inc.

INTRODUCTION

Like many other states, Kentucky has recognized the need for vision and strategic planning with respect to ITS technology deployment. This prompted some key individuals within the Kentucky Transportation Cabinet to begin a process nearly five years ago that has culminated in an ITS Strategic Plan, an ITS Business Plan, and a Statewide ITS Architecture.

The purpose of presenting Kentucky's experience in this report is not to imply that Kentucky's process is perfect or that other jurisdictions should do it the same way. It is simply to share Kentucky's successes and challenges, in the hope that they may prove useful to others who are venturing down the same path. This report describes the process that was followed, discusses some of the key issues that were encountered and key decisions that were made, and presents the deliverables that resulted from the architecture development process.

THE STRATEGIC PLAN

In 1997, Kentucky had many ITS projects already deployed or in the process of deployment. Most of these projects were independent efforts. There was little coordination among projects, no statewide vision or strategy, and no established priorities for ITS deployment. In recognition of this situation, the Kentucky Transportation Cabinet approached the Kentucky Transportation Center with the concept of developing a Strategic Plan for ITS deployment in Kentucky. A work plan was developed in early 1997. The work plan called for development of the Strategic Plan in two phases; the first phase would focus on the areas of Advanced Traveler Information Systems (ATIS), Advanced Rural Transportation Systems (ARTS), and Commercial Vehicle Operations (CVO). The remaining areas of Advanced Traffic Management Systems (ATMS), Advanced Public Transportation Systems (APTS), and Advanced Vehicle Safety Systems (AVSS) were included in the second phase of the project.

The Strategic Plan development began with a survey of other states to determine the status of their strategic planning efforts. Focus groups were then formed and workshops were held to gather input from stakeholders throughout Kentucky regarding ITS issues and opportunities.

The first phase of the Strategic Plan development culminated in the publication of the Phase 1 report in May 1998.

The Strategic Plan Final Report (report number KTC-00-5) was published in June 2000. Information from both phases of the project was incorporated into the final report, so that it was a stand-alone document. The final report included an inventory and map of existing ITS projects in Kentucky. A total of 21 projects were identified, and a one-page description was included for each project. The report also presented a mission statement, a vision, and a set of goals for each functional area of ITS. Finally, the Strategic Plan included brief discussions of Public Relations and Marketing, Operations and Maintenance, and Organizational Structure.

THE BUSINESS PLAN

In order for the Strategic Plan to have practical value, it became clear that the goals stated in the Strategic Plan would need to be translated into specific project recommendations. This was the impetus for development of the ITS Business Plan. The stated purpose of the Business Plan was to guide the implementation of ITS technologies in Kentucky, so that the goals stated in the Strategic Plan would be achieved.

As with the Strategic Plan, the Business Plan development focused heavily on stakeholder involvement. The National ITS Architecture was also a key tool in the process. The National Architecture described ITS in terms of 31 user services (this has increased to 32 with the recent release of Version 4.0 of the Architecture), and these services were further broken down into 63 market packages (now 75). As a starting point in developing a list of projects for the Business Plan, the goals defined in Kentucky's Strategic Plan were mapped against the market packages in the National Architecture, to determine which market packages were applicable to meeting Kentucky's goals. This process identified 50 market packages that were necessary to achieve all of the goals in the Strategic Plan. This list of market packages was then reviewed to identify those market packages that would be implemented by the private sector, local agencies, or different divisions of state government. This review also identified those market packages that could not reasonably be implemented within a six-year time frame, which was the selected time window for the Business Plan.

The resulting, pared-down list of market packages was reviewed again, and priorities were assigned to the market packages based on stakeholder input, engineering judgment, and the number of goals addressed by each market package. This process resulted in a list of 13 primary market packages, three secondary market packages, and three additional packages for consideration. The Study Advisory Committee provided input to the project staff in developing a final list of market packages for inclusion in the Business Plan. The Committee also assisted in updating the inventory of current and planned projects, and in suggesting specific locations where the recommended market packages should be implemented.

The approved list of market packages was used to develop a list of specific project recommendations for the Business Plan. That list was reviewed with selected stakeholders, and was revised based on their input. The resulting list was included in the Business Plan Final Report, which was published in September 2001 (report number KTC-01-23). That report included an inventory of current ITS deployment in Kentucky, a discussion of ITS infrastructure considerations, and descriptions of 21 recommended projects. For each recommended project, the report included an objective, a project description, the recommended location(s), the anticipated cost, and the recommended implementation schedule. Also included, where appropriate, was a map of the recommended location(s).

THE ARCHITECTURE DEVELOPMENT PROCESS

Preliminary Steps and Decisions

In early 1999, during phase two of the Strategic Plan development, members of the Kentucky Transportation Cabinet's ITS Team determined that Kentucky needed to develop a Statewide ITS Architecture. It was recognized that the Architecture would depend heavily on the Strategic Plan and the Business Plan, so the Architecture development was added, as a new task, to the existing Strategic/Business Plan project.

One challenge in developing a regional architecture, particularly a statewide architecture, is determining what such an architecture should "look like." If one were to contact five different states that have prepared statewide architectures and request a copy from each, one would typically get five very different products. In many cases, what is advertised as a statewide architecture is actually more of a strategic plan, or perhaps a business plan, often with an accompanying "sausage diagram." For Kentucky, it was determined that the Statewide Architecture needed to be more than a single, top-level diagram.

At the time when Kentucky began its Architecture development, there was little guidance available on how to prepare a regional ITS architecture. Three significant decisions that were made early in the project were: (1) to build the architecture at the project level first, and then merge these project architectures into a regional architecture; (2) to use market packages (and market package diagrams) as the primary "communications and documentation" tool for development of project architectures; and (3) to use the Turbo Architecture software for building and merging the architectures.

Developing an Inventory and Individual Project Architectures

With these decisions made, development of the ITS Architecture for Kentucky began, using the inventory of projects from the ITS Strategic Plan. Individual project architectures were prepared for every project on the list. For some major projects, a project or regional architecture was already in existence or was being prepared by a private sector firm. In most cases, however, the project architecture had to be developed "from scratch." Through trial and error, project staff developed a procedure for development of a project architecture. That procedure typically involved the following steps:

1. Identify and interview stakeholders to assist in defining the scope and details of the project.

This step usually involved telephone and in-person interviews with key stakeholders, focusing on gaining an understanding of the services provided (or functions performed) by the project, the key subsystems or elements involved, and the information flows necessary for the project to accomplish its desired functions.

2. Prepare market package diagrams to match the project definition.

These diagrams were prepared and customized based on the information gathered during the stakeholder interviews.

3. Review the market package diagrams with stakeholders to verify their accuracy, and make changes as needed.

This was an iterative process where the market package diagrams were presented to key stakeholders and reviewed to verify their accuracy. Errors or omissions in the diagrams were corrected, and the diagrams were again presented to stakeholders for verification.

4. Create a project architecture using the Turbo Architecture software, based on the final market package diagrams.

Once the diagrams were confirmed to be accurate, the information in the diagrams was used to create and customize a project architecture, using the Turbo Architecture software. This was, for the most part, a fairly straightforward process.

Early in the Architecture development process, it became clear that the Architecture needed to reflect planned projects as well as existing projects. Thus, it was evident that the Architecture could not be completed until after the Business Plan was completed. There were also separate efforts underway (using private sector firms) to develop regional ITS architectures for the Cincinnati / Northern Kentucky region and the Cumberland Gap Tunnel region, and these architectures needed to be included in the Statewide Architecture. The Business Plan was published in September 2001, the Northern Kentucky architecture was delivered in November 2001, and the Cumberland Gap Tunnel regional architecture was delivered in June 2002. This cleared the way for completion of the Statewide Architecture.

Merging the Project Architectures to Create a Statewide Architecture

Once the project architectures had been completed, it was necessary to review and compare all the architectures to verify consistency and identify possible redundancy. Specifically, the architectures were compared in terms of the following questions:

- 1) If the same specific element (e.g., the Statewide Transportation Operations Center) appeared in more than one regional architecture, did it have the same name in each?
- 2) If a single operational unit (like a traffic control center) performed multiple functions (such as traffic management center, information service provider, etc.), was it entered into the architecture as a single element, mapped to multiple entities, or as multiple elements, each mapped to a single entity?
- 3) For "generic" elements that would appear in multiple architectures, such as enforcement vehicles, transit vehicles, travelers, etc., were they given generic names from the National Architecture or project-specific names?

As might be expected, since different individuals and organizations were responsible for developing some of the project architectures, there were some differences with regard to the questions above. It was therefore necessary to make changes to the project architectures to bring them into conformity.

Once the project architectures were consistent with one another, it was time to merge the project architectures into a "regional" (i.e., Statewide) architecture. The first step was to get all of the project architectures into a single Turbo Architecture data file. This was accomplished using the "import" function of the Turbo Architecture software. Once the project architectures were all in the same file, the "merge" feature of the Turbo Architecture software was used to create a regional (i.e., Statewide) architecture.

ISSUES AND QUESTIONS THAT WERE ENCOUNTERED

Major Decisions

Some of the primary decisions that were made early in the architecture development process were the following:

- 1) The decision to use market package diagrams as the primary communications and documentation tool for developing the project architectures.
- 2) The decision to use the Turbo Architecture software for the development.

In retrospect, these proved to be sound decisions. Market package diagrams and descriptions provide an effective tool for describing the services that an ITS project will provide and how the project elements will work together to provide the services. Once the diagrams have been developed, they provide virtually all of the information necessary to create the project architecture.

The Turbo Architecture software proved to be effective and relatively easy to use. Further comments on the Turbo Architecture, as well as on the National ITS Architecture, can be found below

Minor Decisions

In addition to the major decisions regarding how to develop a statewide architecture, there were a lot of minor decisions required along the way. Some examples include:

- 1. Is it better to create a new Turbo file for each new project architecture, or should all project architectures be created in a single Turbo file?
 - This may turn out to be primarily a matter of user preference, since it is quite easy to import project architectures from multiple files into a single file.
- 2. When a specific element (such as the TRIMARC control center) serves multiple functions (such as Traffic Management Center, Information Service Provider, etc.), is it better to create a single element and map it to several entities or to create several elements, each mapped to one entity?
 - There may not be a single "right" answer to this question, but it is quite important to achieve consistency from project to project.
- 3. For elements that will occur in several different project architectures (such as drivers, vehicles, transit vehicles, emergency vehicles, etc.), is it better to create specific elements for each project (with project-specific names) or a generic element that will be included in each project?

As with question number two, this is probably more a matter of consistency than it is right or wrong. In other words, either approach should be fine, as long as it is used consistently from project to project.

These issues can be a particular challenge when more than one staff person is working on the architecture, or when different consultants are used to prepare different project architectures, since different people are likely to come up with different answers to the above questions. Then, when the time comes to merge the various project architectures, the inconsistencies become apparent.

Comments on the National Architecture and the Turbo Software

For the most part, the project staff found the National ITS Architecture and the Turbo Architecture software to be excellent tools for regional architecture development. The only "negative" observations were the following:

- 1) Using the market package diagrams from the National ITS Architecture has one drawback—some of the architecture flows that <u>are</u> included in the market package are <u>not</u> included in the market package diagram. Apparently, this was done to keep the market package diagrams from being overly complex. This was not discovered by the project staff until the architecture development was well underway.
- 2) The project staff experienced occasional anomalies with the Turbo Architecture Software. Specifically, there were occasions where reports produced by the Turbo software did not match what was in the database itself.
- 3) With the Turbo Architecture software, it is important to be cautious when making changes to an architecture that has already been customized. It is possible for earlier work (i.e., customizing the architecture) to be lost when the architecture is rebuilt. This can be avoided by making sure the correct options are selected when the architecture is rebuilt.

On the positive side, the Turbo Architecture software was easy to learn and easy to use. In particular, the process of merging project architectures into a regional architecture proved to be amazingly simple and quick.

ARCHITECTURE DELIVERABLES AND DOCUMENTATION

The Statewide Architecture Data File

The primary deliverable from the Statewide Architecture Development is the Microsoft Access database file, which was created using the Turbo Architecture software.

Reports

Using the Turbo Architecture software, numerous reports were generated to display the contents of the Statewide Architecture. These reports include an Inventory Report, Architecture Summary, and Architecture Report. They are presented in Appendix A.

Market Package Diagrams

The market package diagrams were a key element in the architecture development. They were used to define the individual project architectures, and they were the "authoritative source" of data for input into the Turbo Architecture software. Because these diagrams were developed on a project-specific basis, they are presented by project in Appendix B. The color convention used in these market package diagrams is as follows: elements and flows shown in black are currently existing; green items are planned; red items are those that are in the National Architecture but not included in Kentucky's Architecture; and blue items are those that are not in the National Architecture but have been added for Kentucky's Architecture.

Architecture Availability

The Statewide Architecture database file, along with all documentation (including this report), is available on a compact disk from the Kentucky Transportation Center. In addition, the Architecture has been placed on the Center's web site and on the Kentucky Transportation Cabinet's web site. It can be downloaded from either site. The web address for the Kentucky Transportation Center is www.ktc.uky.edu. The web address for the Transportation Cabinet is www.kytc.state.ky.us/operations/ITSB.html.

APPENDIX A

TURBO ARCHITECTURE REPORTS

Architecture Summary

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Architecture Name	Architecture Description	Status	
Statewide (Region)			
-	Statewide Architecture for Kentucky. Created by merging project architectures.		
ARTIMIS (Project)		Existing	
	Associated Element: ARTIMIS Archived Data Administrator Associated Element: ARTIMIS Archived Data Management		
	Associated Element: ARTIMIS Archived Data Management Associated Element: ARTIMIS Area 911/CAD Centers		
	Associated Element: ARTIMIS Area Emergency Response Agencies		
	Associated Element: ARTIMIS Emergency Management		
	Associated Element: ARTIMIS Freeway Incident Response Teams		
	Associated Element: ARTIMIS Information Service Provider		
	Associated Element: ARTIMIS Traffic Management		
	Associated Element: Boone County 911/CAD		
	Associated Element: City of Cincinnati 911/CAD		
	Associated Element: City of Cincinnati Parking Management		
	Associated Element: City of Cincinnati Traffic Management		
	Associated Element: Hamilton County 911/CAD		
	Associated Element: METRO Transit Dispatch Center		
	Associated Element: Other Traffic Management		
	Associated Element: Remote Traveler Support Kiosks		
	Associated Element: Roadway Subsystem		
	Associated Element: TANK Transit Dispatch Center		
Bridge Anti-Icing System (Project)		Existing	
	This describes the automated roadway treatment system in Corbin on I-75.		
	Associated Element: Anti-Icing System		
	Associated Element: Bridge monitoring camera		
	Associated Element: Department of Highways District 11		
Coordinate Traffic Signal Systems (Project)		Existing	
	Statewide effort to coordinate traffic signal systems within cities in Kentucky.		
	Associated Element: Driver		
	Associated Element: KYTC Division of Traffic		
	Associated Element: Roadway Subsystem		
Cumberland Gap Tunnel (Project)		Existing	
	Associated Element: Academic / Research Organizations		
	Associated Element: Basic Vehicle		
	Associated Element: CGT Area Emergency Response Agencies		
	Associated Element: CGT Construction/Maintenance Central Repository		
	Associated Element: CGT Historical Incident Data Repository		
	Associated Element: CGT Historical Traffic Data Repository		
	Associated Element: CGT Regional GIS Agency		
	Associated Element: CGTMC Archive Data Administrator		
	Associated Element: CGTMC Operators / Dispatcher		

Architecture Name

Architecture Description

Status

Associated Element: Commercial Fleet Management Associated Element: Commercial Vehicle Administration Associated Element: Commercial Vehicle Subsystem

Associated Element: Cumberland Gap Information Service Provider

Associated Element: Cumberland Gap ISP Operator

Associated Element: Cumberland Gap Traffic Management Center

Associated Element: Driver

Associated Element: Emergency Vehicle Associated Element: Event Promoters

Associated Element: Fatal Analysis Reporting System

Associated Element: Highway Performance Monitoring System Associated Element: Kentucky Historical Incident Data Repository Associated Element: Kentucky Historical Traffic Data Repository

Associated Element: Media

Associated Element: Personal Information Access

Associated Element: Private commercial information providers

Associated Element: Remote Traveler Support Kiosks

Associated Element: Roadway Environment Associated Element: Roadway Subsystem Associated Element: RWIS Stations

Associated Element: STOC Information Service Provider

Associated Element: Tennessee Historical Incident Data Repository Associated Element: Tennessee Historical Traffic Data Repository

Associated Element: Traffic Associated Element: Traveler

Associated Element: Tunnel Electronic Tag Reader

Associated Element: Tunnel Emergency Management Center

Associated Element: Tunnel Emergency Personnel

Associated Element: Tunnel Emergency System Operator

Associated Element: Tunnel Roadway Subsystem

Associated Element: Vehicles on the Road

Associated Element: Weather Service

Associated Element: Yellow Pages Service Providers

CVO (Project)

Existing

Single project architecture to describe all ITS/CVO projects in KY

Associated Element: Commercial Fleet Management

Associated Element: Commercial Vehicle

Associated Element: Commercial Vehicle Administration

Associated Element: Commercial Vehicle Driver

Associated Element: Commercial Vehicle Inspection Facility

Associated Element: Commercial Vehicle Subsystem Associated Element: CVO Information Requestor

Associated Element: CVO Inspector Associated Element: Financial Institution Associated Element: IRP Clearinghouse

Associated Element: MARS
Associated Element: MCMIS
Associated Element: Other CVAS
Associated Element: Payment Instrument
Associated Element: Remote Monitoring System

Associated Element: RPC Associated Element: SAFER

Lexington (Project)

Existing

ITS applications in the Lexington-Fayette Co. area

Associated Element: Driver

Associated Element: Emergency Vehicle Associated Element: Event Promoters Associated Element: Financial Institution

Associated Element: Fire and Emergency Services Personnel
Associated Element: Government Reporting Systems
Associated Element: Lexington Archived Data Administrator
Associated Element: Lexington Archived Data Management Center
Associated Element: Lexington Archived Data User Systems
Associated Element: Lexington Emergency Management Center

Associated Element: Lexington Emergency Management Center Personnel

Associated Element: Lexington Police Department

Associated Element: Lexington TMC Operations Personnel

Associated Element: Lexington Traffic Management

Associated Element: Lexington Transit Management Center Associated Element: Lexington Transit Mgmt. Center Personnel Associated Element: LFUCG Division of Streets and Roads

Associated Element: Media

Associated Element: Other Traffic Management Associated Element: Payment Instrument

Associated Element: Pedestrians

Associated Element: Personal Information Access

Associated Element: Police Personnel

Associated Element: Remote Traveler Support Kiosks

Associated Element: Roadway Environment Associated Element: Roadway Subsystem

Associated Element: Traffic

Associated Element: Traffic Information Network

Associated Element: Traffic Information Network Personnel

Associated Element: Transit Driver Associated Element: Transit User Associated Element: Transit Vehicle Associated Element: Traveler Associated Element: Weather Service

Pulaski County Signal Preemption (Project)

Existing

This project describes the signal preemption system in Pulaski county at US27 and Sallee Street.

Associated Element: Department of Highways District 8

Associated Element: Roadway Subsystem Associated Element: Somerset Fire Station

Signal Preemption for Bowling Green (Project)

Existing

Associated Element: Department of Highways District 3

Associated Element: Fire Vehicles
Associated Element: Roadway Subsystem

Signal Preemption for Owensboro (Project)

Planned

Architecture Name Architecture Description Status

Associated Element: Department of Highways District 2

Associated Element: Fire Vehicles
Associated Element: Roadway Subsystem

Signal Pre-emption in Flemingsburg (Project)

Existing

This project architecture describes the pre-emption system in Flemingsburg at KY11 & KY32/KY57 and KY32 & KY11/KY559.

Associated Element: Department of Highways District 9 Associated Element: Emergency Vehicle Personnel Associated Element: Fleming County Dispatch Center Associated Element: Roadway Subsystem

Signal Preemption Paducah (Project)

Existing

This architecture describes the signal preemption systems in Paducah at intersections US45 & Jackson Street and US60 & Wayne Sullivan Drive.

Associated Element: Department of Highways District 1

Associated Element: Paducah Fire Stations Associated Element: Roadway Subsystem

STOC (Project) Existing

Statewide Transportation Operations Center

Associated Element: ARTIMIS Traffic Management

Associated Element: Basic Vehicle

Associated Element: Commonwealth EOC

Associated Element: Driver

Associated Element: Emergency Vehicle Associated Element: Event Promoters Associated Element: Financial Institution

Associated Element: Indianapolis Traffic Management

Associated Element: Kentucky State Police

Associated Element: KVE Emergency Management Associated Element: KYTC District Maintenance Associated Element: Lexington Traffic Management

Associated Element: Media

Associated Element: Nashville Traffic Management Associated Element: Other Information Service Providers

Associated Element: Personal Information Access

Associated Element: Private commercial information providers

Associated Element: Remote Traveler Support Kiosks

Associated Element: Roadway Environment Associated Element: Roadway Subsystem Associated Element: Rural Transit Providers

Associated Element: RWIS Stations

Associated Element: STOC Information Service Provider Associated Element: STOC Operations Personnel Associated Element: STOC Traffic Management Associated Element: TRIMARC Traffic Management

Associated Element: Weather Service

Associated Element: Yellow Pages Service Providers

TRIMARC (Project)

Existing

Architecture Name

Architecture Description

Status

Louisville Area Project Architecture

Associated Element: ARTIMIS Traffic Management

Associated Element: Basic Vehicle Associated Element: Driver

Associated Element: Emergency Vehicle Associated Element: Event Promoters

Associated Element: Indianapolis Traffic Management Associated Element: INDOT District Maintenance Associated Element: Jefferson County EMA Associated Element: KIPDA Data System Associated Element: KYTC District Maintenance

Associated Element: KYTC ftp server

Associated Element: Lexington Traffic Management

Associated Element: Location Data Source

Associated Element: Media

Associated Element: Nashville Traffic Management

Associated Element: Other EM

Associated Element: Other Information Service Providers

Associated Element: Personal Information Access Associated Element: Remote Traveler Support Kiosks

Associated Element: Roadway Environment
Associated Element: Roadway Subsystem
Associated Element: STOC Traffic Management
Associated Element: TARC Transit Management

Associated Element: Transit User Associated Element: Transit Vehicle

Associated Element: TRIMARC Archived Data Management

Associated Element: TRIMARC Area Emergency Response Agencies

Associated Element: TRIMARC Data Administrator

Associated Element: TRIMARC Freeway Service Patrol Vans Associated Element: TRIMARC Information Service Provider

Associated Element: TRIMARC Operations Personnel Associated Element: TRIMARC Traffic Management

Associated Element: Vehicle

Associated Element: Weather Service

Truck Rollover Warning Project (Project)

Existing

Based on length, commercial vehicles are identified. Then based on speed, specific vehicles receive a message, "Trucks Reduce Speed".

Associated Element: Acoustic detectors Associated Element: Basic Vehicle

Associated Element: Department of Highways District 2

Associated Element: EIS wide beam radar Associated Element: Fiber Optic Message Sign

Stakeholders Report

9/5/2002 11:22:44AM

Stakeholder

Boone County

Description:

Associated Element: Boone County 911/CAD

Bowling Green Fire Department

Description:

Associated Element: Fire Vehicles

City of Cincinnati

Description:

Associated Element: City of Cincinnati 911/CAD

Associated Element: City of Cincinnati Parking Management Associated Element: City of Cincinnati Traffic Management

City of Flemingsburg

Description:

Associated Element: Emergency Vehicle Personnel Associated Element: Fleming County Dispatch Center

County/State Agencies

Description:

Associated Element: CGT Area Emergency Response Agencies

Department of Highways - D2

Description:

Associated Element: Acoustic detectors
Associated Element: EIS wide beam radar
Associated Element: Fiber Optic Message Sign

Dept of Vehicle Regulation

Description:

Associated Element: Commercial Vehicle Administration
Associated Element: Commercial Vehicle Inspection Facility

Associated Element: CVO Inspector

Associated Element: KVE Emergency Management Associated Element: Remote Monitoring System

Division of Emergency Management

Description:

Associated Element: Commonwealth EOC

FHWA

Description:

Associated Element: Fatal Analysis Reporting System

Associated Element: Highway Performance Monitoring System

Finance and Administration Cabinet

Description:

Associated Element: MARS

Stakeholder

FMCSA--USDOT

Description:

Associated Element: MCMIS Associated Element: SAFER

Hamilton County

Description: Ohio

Associated Element: Hamilton County 911/CAD

IFTA, Inc.

Description:

Associated Element: RPC

Indiana DOT

Description:

Associated Element: Indianapolis Traffic Management Associated Element: INDOT District Maintenance

Individual

Description:

Associated Element: Traveler

IRP, Inc.

Description: International Registration Plan

Associated Element: IRP Clearinghouse

Jefferson County EMA

Description:

Associated Element: Jefferson County EMA

Kentucky State Police

Description:

Associated Element: Kentucky State Police

Kentucky Transportation Cabinet

Description:

Associated Element: Anti-Icing System
Associated Element: Bridge monitoring camera

Associated Element: Department of Highways District 1
Associated Element: Department of Highways District 11
Associated Element: Department of Highways District 2
Associated Element: Department of Highways District 3
Associated Element: Department of Highways District 8
Associated Element: Department of Highways District 9
Associated Element: KYTC District Maintenance
Associated Element: KYTC Division of Traffic
Associated Element: KYTC ftp server

Associated Element: Location Data Source

Associated Element: Remote Traveler Support Kiosks

Associated Element: Roadway Subsystem Associated Element: RWIS Stations

Associated Element: STOC Information Service Provider Associated Element: STOC Operations Personnel

Stakeholder

Associated Element: STOC Traffic Management

Associated Element: TRIMARC Archived Data Management

Associated Element: TRIMARC Data Administrator

Associated Element: TRIMARC Freeway Service Patrol Vans Associated Element: TRIMARC Information Service Provider Associated Element: TRIMARC Operations Personnel Associated Element: TRIMARC Traffic Management

KIPDA

Description: Kentucky-Indiana Planning and Development Agency

Associated Element: KIPDA Data System

KYTC

Description:

Associated Element: Kentucky Historical Incident Data Repository
Associated Element: Kentucky Historical Traffic Data Repository

Associated Element: Tunnel Electronic Tag Reader

KYTC and ODOT

Description: Kentucky Transportation Cabinet and Ohio Department of Transportation

Associated Element: ARTIMIS Archived Data Administrator Associated Element: ARTIMIS Archived Data Management Associated Element: ARTIMIS Emergency Management

Associated Element: ARTIMIS Freeway Incident Response Teams Associated Element: ARTIMIS Information Service Provider Associated Element: ARTIMIS Traffic Management

KYTC District 10

Description:

Associated Element: CGT Construction/Maintenance Central Repository

Associated Element: CGT Historical Incident Data Repository
Associated Element: CGT Historical Traffic Data Repository
Associated Element: CGTMC Archive Data Administrator
Associated Element: CGTMC Operators / Dispatcher

Associated Element: Cumberland Gap Information Service Provider

Associated Element: Cumberland Gap ISP Operator

Associated Element: Cumberland Gap Traffic Management Center Associated Element: Tunnel Emergency Management Center

Associated Element: Tunnel Emergency Personnel
Associated Element: Tunnel Emergency System Operator
Associated Element: Tunnel Roadway Subsystem

Lexington-Fayette Urban County Government

Description:

Associated Element: Lexington Traffic Management

LexTran

Description:

Associated Element: Lexington Transit Management Center Associated Element: Lexington Transit Mgmt. Center Personnel

LFUCG

Description: Lexington-Fayette Urban County Government

LFUCG Division of Fire and Emergency Services

Description:

Associated Element: Fire and Emergency Services Personnel

LFUCG Division of Planning/MPO

Description:

Associated Element: Government Reporting Systems
Associated Element: Lexington Archived Data Administrator
Associated Element: Lexington Archived Data Management Center
Associated Element: Lexington Archived Data User Systems

LFUCG Division of Police

Description:

Associated Element: Lexington Emergency Management Center

Associated Element: Lexington Emergency Management Center Personnel

Associated Element: Lexington Police Department

Associated Element: Police Personnel

LFUCG Division of Streets and Roads

Description:

Associated Element: LFUCG Division of Streets and Roads

LFUCG Division of Traffic Engineering

Description:

Associated Element: Lexington TMC Operations Personnel

Associated Element: Traffic Information Network

Associated Element: Traffic Information Network Personnel

METRO

Description:

Associated Element: METRO Transit Dispatch Center

National Weather Service

Description:

Associated Element: Weather Service

Paducah Fire Department

Description:

Associated Element: Paducah Fire Stations

Somerset Fire Department

Description:

Associated Element: Somerset Fire Station

TANK

Description: Transit Authority of Northern Kentucky

Associated Element: TANK Transit Dispatch Center

TARC

Description: Transit Authority of River City

Associated Element: TARC Transit Management

Associated Element: Transit User
Associated Element: Transit Vehicle

Stakeholder

TDOT

Description:

Associated Element: Tennessee Historical Incident Data Repository
Associated Element: Tennessee Historical Traffic Data Repository

Tennessee DOT

Description:

Associated Element: Nashville Traffic Management

Trucking company

Description:

Associated Element: Commercial Fleet Management

Associated Element: Commercial Vehicle
Associated Element: Commercial Vehicle Driver
Associated Element: Commercial Vehicle Subsystem

Various Owners

Description:

Associated Element: Academic / Research Organizations

Associated Element: CGT Regional GIS Agency

Inventory Report

9/5/2002 11:21:10AM

Element Inventory for Region Statewide

Academic / Research Organizations

Status: Existing

Associated Stakeholder: Various Owners

Mapped to Entity: Archived Data User Systems Project: Cumberland Gap Tunnel

Acoustic detectors

Status: Existing

Associated Stakeholder: Department of Highways - D2

Mapped to Entity: Roadway Subsystem Project: Truck Rollover Warning Project

Anti-Icing System

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Roadway Subsystem Project: Bridge Anti-Icing System

ARTIMIS Archived Data Administrator

Status: Planned

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Archived Data Administrator Project: ARTIMIS

ARTIMIS Archived Data Management

Status: Planned

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Other ArchivesProject: ARTIMISMapped to Entity: Archived Data Management SubsystemProject: ARTIMIS

ARTIMIS Area 911/CAD Centers

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Emergency ManagementProject: ARTIMISMapped to Entity: Other EMProject: ARTIMIS

ARTIMIS Area Emergency Response Agencies

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other EMProject: ARTIMISMapped to Entity: Emergency ManagementProject: ARTIMIS

ARTIMIS Emergency Management

Status: Existing

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Emergency ManagementProject: ARTIMISMapped to Entity: Other EMProject: ARTIMIS

ARTIMIS Freeway Incident Response Teams

Status: Planned

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Emergency Vehicle Subsystem Project: ARTIMIS

ARTIMIS Information Service Provider

Status: Existing

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Information Service ProviderProject: ARTIMISMapped to Entity: Other ISPProject: ARTIMIS

ARTIMIS Traffic Management

Status: Existing

Associated Stakeholder: KYTC and ODOT

Mapped to Entity: Other TMProject: ARTIMISMapped to Entity: Traffic ManagementProject: ARTIMISMapped to Entity: Other TMProject: STOCMapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Other TMProject: TRIMARCMapped to Entity: Traffic ManagementProject: TRIMARC

Basic Vehicle

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Basic Vehicle Project: Cumberland Gap Tunnel

Mapped to Entity: Basic VehicleProject: STOCMapped to Entity: Basic VehicleProject: TRIMARC

Mapped to Entity: Basic Vehicle Project: Truck Rollover Warning Project

Boone County 911/CAD

Status: Existing

Associated Stakeholder: Boone County

Mapped to Entity: Emergency ManagementProject: ARTIMISMapped to Entity: Other EMProject: ARTIMIS

Bridge monitoring camera

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Roadway Subsystem Project: Bridge Anti-Icing System

CGT Area Emergency Response Agencies

Status: Existing

Associated Stakeholder: County/State Agencies

Mapped to Entity: Other EMProject: Cumberland Gap TunnelMapped to Entity: Emergency ManagementProject: Cumberland Gap Tunnel

CGT Construction/Maintenance Central Repository

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: Construction and Maintenance Project: Cumberland Gap Tunnel

CGT Historical Incident Data Repository

Status: Existing

Associated Stakeholder: KYTC District 10

Mapped to Entity: Other ArchivesProject: Cumberland Gap TunnelMapped to Entity: Archived Data Management SubsystemProject: Cumberland Gap Tunnel

CGT Historical Traffic Data Repository

Status: Existing

Associated Stakeholder: KYTC District 10

Mapped to Entity: Archived Data Management Subsystem

Mapped to Entity: Other Archives P.

Project: Cumberland Gap Tunnel*Project:* Cumberland Gap Tunnel

CGT Regional GIS Agency

Status: Existing

Associated Stakeholder: Various Owners

Mapped to Entity: Map Update Provider Project: Cumberland Gap Tunnel

CGTMC Archive Data Administrator

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: Archived Data Administrator Project: Cumberland Gap Tunnel

CGTMC Operators / Dispatcher

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: Traffic Operations Personnel Project: Cumberland Gap Tunnel

City of Cincinnati 911/CAD

Status: Existing

Associated Stakeholder: City of Cincinnati

Mapped to Entity: Emergency ManagementProject: ARTIMISMapped to Entity: Other EMProject: ARTIMIS

City of Cincinnati Parking Management

Status: Planned

Associated Stakeholder: City of Cincinnati

Mapped to Entity: Parking Management Project: ARTIMIS

City of Cincinnati Traffic Management

Status: Existing

Associated Stakeholder: City of Cincinnati

Mapped to Entity: Other TMProject: ARTIMISMapped to Entity: Traffic ManagementProject: ARTIMIS

Commercial Fleet Management

Status: Existing

Associated Stakeholder: Trucking company

Mapped to Entity: Fleet and Freight Management Project: Cumberland Gap Tunnel

Mapped to Entity: Fleet and Freight Management Project: CVO

Commercial Vehicle

Status: Existing

Associated Stakeholder: Trucking company

Mapped to Entity: Commercial Vehicle Project: CVO

Commercial Vehicle Administration

Status: Existing

Associated Stakeholder: Dept of Vehicle Regulation

Mapped to Entity: Commercial Vehicle AdministrationProject: Cumberland Gap TunnelMapped to Entity: Other CVASProject: Cumberland Gap Tunnel

Mapped to Entity: Commercial Vehicle AdministrationProject: CVOMapped to Entity: Other CVASProject: CVO

Commercial Vehicle Driver

Status: Existing

Associated Stakeholder: Trucking company

Mapped to Entity: Commercial Vehicle Driver Project: CVO

Commercial Vehicle Inspection Facility

Status: Existing

Associated Stakeholder: Dept of Vehicle Regulation

Mapped to Entity: Commercial Vehicle Check Project: CVO

Commercial Vehicle Subsystem

Status: Existing

Associated Stakeholder: Trucking company

Mapped to Entity: Commercial Vehicle Subsystem Project: Cumberland Gap Tunnel

Mapped to Entity: Commercial Vehicle Subsystem Project: CVO

Commonwealth EOC

Status: Existing

Associated Stakeholder: Division of Emergency Management

Mapped to Entity: Other EMProject: STOCMapped to Entity: Emergency ManagementProject: STOC

Cumberland Gap Information Service Provider

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: Information Service ProviderProject: Cumberland Gap TunnelMapped to Entity: Other ISPProject: Cumberland Gap Tunnel

Cumberland Gap ISP Operator

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: ISP Operator Project: Cumberland Gap Tunnel

Cumberland Gap Traffic Management Center

Status: Planned

Associated Stakeholder: KYTC District 10

Mapped to Entity: Traffic ManagementProject: Cumberland Gap TunnelMapped to Entity: Other TMProject: Cumberland Gap Tunnel

CVO Information Requestor

Status: Existing

Associated Stakeholder: None

Mapped to Entity: CVO Information Requestor Project: CVO

CVO Inspector

Status: Existing

Associated Stakeholder: Dept of Vehicle Regulation

Mapped to Entity: CVO Inspector Project: CVO

Department of Highways District 1

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: Signal Preemption PaducahMapped to Entity: Traffic ManagementProject: Signal Preemption Paducah

Department of Highways District 11

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: Bridge Anti-Icing SystemMapped to Entity: Traffic ManagementProject: Bridge Anti-Icing System

Department of Highways District 2

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Traffic ManagementProject: Signal Preemption for OwensboroMapped to Entity: Other TMProject: Signal Preemption for OwensboroMapped to Entity: Other TMProject: Truck Rollover Warning ProjectMapped to Entity: Traffic ManagementProject: Truck Rollover Warning Project

Department of Highways District 3

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: Signal Preemption for Bowling GreenMapped to Entity: Traffic ManagementProject: Signal Preemption for Bowling Green

Department of Highways District 8

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: Pulaski County Signal PreemptionMapped to Entity: Traffic ManagementProject: Pulaski County Signal Preemption

Department of Highways District 9

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Traffic ManagementProject: Signal Pre-emption in FlemingsburgMapped to Entity: Other TMProject: Signal Pre-emption in Flemingsburg

Driver

Status: Existing

Associated Stakeholder: None

Mapped to Entity: DriverProject: Coordinate Traffic Signal SystemsMapped to Entity: DriverProject: Cumberland Gap Tunnel

Mapped to Entity: DriverProject: LexingtonMapped to Entity: DriverProject: STOCMapped to Entity: DriverProject: TRIMARC

EIS wide beam radar

Status: Existing

Associated Stakeholder: Department of Highways - D2

Mapped to Entity: Roadway Subsystem Project: Truck Rollover Warning Project

Emergency Vehicle

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Emergency Vehicle Subsystem Project: Cumberland Gap Tunnel

Mapped to Entity:Emergency Vehicle SubsystemProject:LexingtonMapped to Entity:Emergency Vehicle SubsystemProject:STOCMapped to Entity:Emergency Vehicle SubsystemProject:TRIMARC

Emergency Vehicle Personnel

Status: Existing

Associated Stakeholder: City of Flemingsburg

Mapped to Entity: Emergency Personnel Project: Signal Pre-emption in Flemingsburg

Event Promoters

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Event Promoters Project: Cumberland Gap Tunnel

Mapped to Entity: Event PromotersProject: LexingtonMapped to Entity: Event PromotersProject: STOCMapped to Entity: Event PromotersProject: TRIMARC

Fatal Analysis Reporting System

Status: Existing

Associated Stakeholder: FHWA

Mapped to Entity: Government Reporting Systems Project: Cumberland Gap Tunnel

Fiber Optic Message Sign

Status: Existing

Associated Stakeholder: Department of Highways - D2

Mapped to Entity: Roadway Subsystem Project: Truck Rollover Warning Project

Financial Institution

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Financial InstitutionProject: CVOMapped to Entity: Financial InstitutionProject: LexingtonMapped to Entity: Financial InstitutionProject: STOC

Fire and Emergency Services Personnel

Status: Existing

Associated Stakeholder: LFUCG Division of Fire and Emergency Services

Mapped to Entity: Emergency Personnel Project: Lexington

Fire Vehicles

Status: Existing

Associated Stakeholder: Bowling Green Fire Department

Mapped to Entity: Emergency Vehicle SubsystemProject: Signal Preemption for Bowling GreenMapped to Entity: Emergency Vehicle SubsystemProject: Signal Preemption for Owensboro

Fleming County Dispatch Center

Status: Existing

Associated Stakeholder: City of Flemingsburg

Mapped to Entity: Other EM Project: Signal Pre-emption in Flemingsburg

Mapped to Entity: Emergency Management Project: Signal Pre-emption in Flemingsburg

Government Reporting Systems

Status: Existing

Associated Stakeholder: LFUCG Division of Planning/MPO

Mapped to Entity: Government Reporting Systems Project: Lexington

Hamilton County 911/CAD

Status: Existing

Associated Stakeholder: Hamilton County

Mapped to Entity: Other EM Project: ARTIMIS

Mapped to Entity: Emergency Management Project: ARTIMIS

Highway Performance Monitoring System

Status: Existing

Associated Stakeholder: FHWA

Mapped to Entity: Government Reporting Systems Project: Cumberland Gap Tunnel

Indianapolis Traffic Management

Status: Existing

Associated Stakeholder: Indiana DOT

Mapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Other TMProject: STOCMapped to Entity: Traffic ManagementProject: TRIMARCMapped to Entity: Other TMProject: TRIMARC

INDOT District Maintenance

Status: Existing

Associated Stakeholder: Indiana DOT

Mapped to Entity: Construction and Maintenance Project: TRIMARC

IRP Clearinghouse

Status: Existing

Associated Stakeholder: IRP, Inc.

Mapped to Entity: Other CVAS Project: CVO

Jefferson County EMA

Status: Existing

Associated Stakeholder: Jefferson County EMA

Mapped to Entity: Emergency ManagementProject: TRIMARCMapped to Entity: Other EMProject: TRIMARC

Kentucky Historical Incident Data Repository

Status: Existing

Associated Stakeholder: KYTC

Mapped to Entity: Other Archives Project: Cumberland Gap Tunnel

Kentucky Historical Traffic Data Repository

Status: Existing

Associated Stakeholder: KYTC

Mapped to Entity: Other Archives Project: Cumberland Gap Tunnel

Kentucky State Police

Status: Existing

Associated Stakeholder: Kentucky State Police

Mapped to Entity: Other EM Project: STOC

KIPDA Data System

Status: Existing

Associated Stakeholder: KIPDA

Mapped to Entity: Archived Data User Systems Project: TRIMARC

KVE Emergency Management

Status: Existing

Associated Stakeholder: Dept of Vehicle Regulation

Mapped to Entity: Emergency Management Project: STOC

Mapped to Entity: Other EM Project: STOC

KYTC District Maintenance

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Construction and MaintenanceProject: STOCMapped to Entity: Construction and MaintenanceProject: TRIMARC

KYTC Division of Traffic

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: Coordinate Traffic Signal SystemsMapped to Entity: Traffic ManagementProject: Coordinate Traffic Signal Systems

KYTC ftp server

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Archived Data User Systems Project: TRIMARC

Lexington Archived Data Administrator

Status: Existing

Associated Stakeholder: LFUCG Division of Planning/MPO

Mapped to Entity: Archived Data Administrator Project: Lexington

Lexington Archived Data Management Center

Status: Existing

Associated Stakeholder: LFUCG Division of Planning/MPO

Mapped to Entity: Other ArchivesProject: LexingtonMapped to Entity: Archived Data Management SubsystemProject: Lexington

Lexington Archived Data User Systems

Status: Existing

Associated Stakeholder: LFUCG Division of Planning/MPO

Mapped to Entity: Archived Data User Systems Project: Lexington

Lexington Emergency Management Center

Status: Existing

Associated Stakeholder: LFUCG Division of Police

Mapped to Entity: Other EMProject: LexingtonMapped to Entity: Emergency ManagementProject: Lexington

Lexington Emergency Management Center Personnel

Status: Existing

Associated Stakeholder: LFUCG Division of Police

Mapped to Entity: Emergency System Operator Project: Lexington

Lexington Police Department

Status: Existing

Associated Stakeholder: LFUCG Division of Police

Mapped to Entity: Enforcement Agency Project: Lexington

Lexington TMC Operations Personnel

Status: Existing

Associated Stakeholder: LFUCG Division of Traffic Engineering

Mapped to Entity: ISP Operator Project: Lexington

Mapped to Entity: Traffic Operations Personnel Project: Lexington

Lexington Traffic Management

Status: Existing

Associated Stakeholder: Lexington-Fayette Urban County Government

Mapped to Entity: Traffic ManagementProject: LexingtonMapped to Entity: Other TMProject: LexingtonMapped to Entity: Other TMProject: STOCMapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Other TMProject: TRIMARCMapped to Entity: Traffic ManagementProject: TRIMARC

Lexington Transit Management Center

Status: Existing

Associated Stakeholder: LexTran

Mapped to Entity: Other TRMProject: LexingtonMapped to Entity: Transit ManagementProject: Lexington

Lexington Transit Mgmt. Center Personnel

Status: Existing

Associated Stakeholder: LexTran

Mapped to Entity: Transit System OperatorsProject: LexingtonMapped to Entity: Transit Fleet ManagerProject: Lexington

LFUCG Division of Streets and Roads

Status: Existing

Associated Stakeholder: LFUCG Division of Streets and Roads

Mapped to Entity: Construction and Maintenance Project: Lexington

Location Data Source

Status: Planned

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Location Data Source Project: TRIMARC

MARS

Status: Existing

Associated Stakeholder: Finance and Administration Cabinet

Mapped to Entity: Government Administrators Project: CVO

MCMIS

Status: Existing

Associated Stakeholder: FMCSA--USDOT

Mapped to Entity: Other CVAS Project: CVO

Media

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Media Project: Cumberland Gap Tunnel

Mapped to Entity: MediaProject: LexingtonMapped to Entity: MediaProject: STOCMapped to Entity: MediaProject: TRIMARC

METRO Transit Dispatch Center

Status: Existing

Associated Stakeholder: METRO

Mapped to Entity: Other TRMProject: ARTIMISMapped to Entity: Transit ManagementProject: ARTIMIS

Nashville Traffic Management

Status: Existing

Associated Stakeholder: Tennessee DOT

Mapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Other TMProject: STOCMapped to Entity: Traffic ManagementProject: TRIMARCMapped to Entity: Other TMProject: TRIMARC

Other CVAS

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other CVAS Project: CVO

Other EM

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other EM Project: TRIMARC

Other Information Service Providers

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Information Service ProviderProject: STOCMapped to Entity: Other ISPProject: STOCMapped to Entity: Other ISPProject: TRIMARCMapped to Entity: Information Service ProviderProject: TRIMARC

Other Traffic Management

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other TMProject: ARTIMISMapped to Entity: Traffic ManagementProject: ARTIMISMapped to Entity: Traffic ManagementProject: LexingtonMapped to Entity: Other TMProject: Lexington

Paducah Fire Stations

Status: Existing

Associated Stakeholder: Paducah Fire Department

Mapped to Entity: Other EMProject: Signal Preemption PaducahMapped to Entity: Emergency ManagementProject: Signal Preemption Paducah

Payment Instrument

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Payment InstrumentProject: CVOMapped to Entity: Payment InstrumentProject: Lexington

Pedestrians

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Pedestrians Project: Lexington

Personal Information Access

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Personal Information Access Project: Cumberland Gap Tunnel

 Mapped to Entity: Personal Information Access
 Project: Lexington

 Mapped to Entity: Personal Information Access
 Project: STOC

 Mapped to Entity: Personal Information Access
 Project: TRIMARC

Police Personnel

Status: Existing

Associated Stakeholder: LFUCG Division of Police

Mapped to Entity: Emergency Personnel Project: Lexington

Private commercial information providers

Status: Planned

Associated Stakeholder: None

Mapped to Entity: Other ISP Project: Cumberland Gap Tunnel
Mapped to Entity: Information Service Provider Project: Cumberland Gap Tunnel

Mapped to Entity: Other ISPProject: STOCMapped to Entity: Information Service ProviderProject: STOC

Remote Monitoring System

Status: Existing

Associated Stakeholder: Dept of Vehicle Regulation

Mapped to Entity: Roadway Subsystem Project: CVO

Remote Traveler Support Kiosks

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Remote Traveler Support Project: ARTIMIS

Mapped to Entity: Remote Traveler Support Project: Cumberland Gap Tunnel

Mapped to Entity: Remote Traveler SupportProject: LexingtonMapped to Entity: Remote Traveler SupportProject: STOCMapped to Entity: Remote Traveler SupportProject: TRIMARC

Roadway Subsystem

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Roadway Subsystem Project: ARTIMIS

Mapped to Entity: Roadway Subsystem Project: Coordinate Traffic Signal Systems

Mapped to Entity: Roadway Subsystem Project: Cumberland Gap Tunnel

Mapped to Entity: Roadway Subsystem Project: Lexington

Mapped to Entity: Roadway SubsystemProject: Pulaski County Signal PreemptionMapped to Entity: Roadway SubsystemProject: Signal Preemption for Bowling GreenMapped to Entity: Roadway SubsystemProject: Signal Preemption for OwensboroMapped to Entity: Roadway SubsystemProject: Signal Pre-emption in Flemingsburg

Mapped to Entity: Roadway Subsystem Project: Signal Preemption Paducah

Mapped to Entity: Roadway Subsystem Project: STOC

Mapped to Entity: Roadway Subsystem Project: TRIMARC

RPC

Status: Existing

Associated Stakeholder: IFTA, Inc.

Mapped to Entity: Other CVAS Project: CVO

Rural Transit Providers

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other TRMProject: STOCMapped to Entity: Transit ManagementProject: STOC

RWIS Stations

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Roadway Subsystem Project: Cumberland Gap Tunnel

Mapped to Entity: Roadway Subsystem Project: STOC

SAFER

Status: Existing

Associated Stakeholder: FMCSA--USDOT

Mapped to Entity: Other CVAS Project: CVO

Somerset Fire Station

Status: Existing

Associated Stakeholder: Somerset Fire Department

Mapped to Entity: Emergency ManagementProject: Pulaski County Signal PreemptionMapped to Entity: Other EMProject: Pulaski County Signal Preemption

STOC Information Service Provider

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other ISPProject: Cumberland Gap TunnelMapped to Entity: Information Service ProviderProject: Cumberland Gap Tunnel

Mapped to Entity: Information Service ProviderProject: STOCMapped to Entity: Other ISPProject: STOC

STOC Operations Personnel

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Traffic Operations Personnel Project: STOC

STOC Traffic Management

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Other TMProject: STOCMapped to Entity: Other TMProject: TRIMARCMapped to Entity: Traffic ManagementProject: TRIMARC

TANK Transit Dispatch Center

Status: Existing

Associated Stakeholder: TANK

Mapped to Entity: Other TRMProject: ARTIMISMapped to Entity: Transit ManagementProject: ARTIMIS

TARC Transit Management

Status: Existing

Associated Stakeholder: TARC

Mapped to Entity: Transit ManagementProject: TRIMARCMapped to Entity: Other TRMProject: TRIMARC

Tennessee Historical Incident Data Repository

Status: Existing

Associated Stakeholder: TDOT

Mapped to Entity: Other Archives Project: Cumberland Gap Tunnel

Tennessee Historical Traffic Data Repository

Status: Existing

Associated Stakeholder: TDOT

Mapped to Entity: Other Archives Project: Cumberland Gap Tunnel

Traffic Information Network

Status: Existing

Associated Stakeholder: LFUCG Division of Traffic Engineering

Mapped to Entity: Information Service ProviderProject: LexingtonMapped to Entity: Other ISPProject: Lexington

Traffic Information Network Personnel

Status: Existing

Associated Stakeholder: LFUCG Division of Traffic Engineering

Mapped to Entity: ISP Operator Project: Lexington

Transit Driver

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Transit Driver Project: Lexington

Transit User

Status: Existing

Associated Stakeholder: TARC

Mapped to Entity: Transit UserProject: LexingtonMapped to Entity: Transit UserProject: TRIMARC

Transit Vehicle

Status: Existing

Associated Stakeholder: TARC

Mapped to Entity: Transit Vehicle Subsystem Project: Lexington

Mapped to Entity: Transit Vehicle Subsystem Project: TRIMARC

Traveler

Status: Existing

Associated Stakeholder: Individual

Mapped to Entity: Traveler Project: Cumberland Gap Tunnel

Mapped to Entity: Traveler Project: Lexington

TRIMARC Archived Data Management

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Archived Data Management SubsystemProject: TRIMARCMapped to Entity: Other ArchivesProject: TRIMARC

TRIMARC Area Emergency Response Agencies

Status: Existing

Associated Stakeholder: None

Mapped to Entity: Other EMProject: TRIMARCMapped to Entity: Emergency ManagementProject: TRIMARC

TRIMARC Data Administrator

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Archived Data Administrator Project: TRIMARC

TRIMARC Freeway Service Patrol Vans

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Emergency Vehicle Subsystem Project: TRIMARC

TRIMARC Information Service Provider

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other ISPProject: TRIMARCMapped to Entity: Information Service ProviderProject: TRIMARC

TRIMARC Operations Personnel

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Traffic Operations Personnel Project: TRIMARC

TRIMARC Traffic Management

Status: Existing

Associated Stakeholder: Kentucky Transportation Cabinet

Mapped to Entity: Other TMProject: STOCMapped to Entity: Traffic ManagementProject: STOCMapped to Entity: Traffic ManagementProject: TRIMARCMapped to Entity: Other TMProject: TRIMARC

Tunnel Electronic Tag Reader

Status: Planned

Associated Stakeholder: KYTC

Mapped to Entity: Commercial Vehicle Check Project: Cumberland Gap Tunnel

Tunnel Emergency Management Center

Status: Existing

Associated Stakeholder: KYTC District 10

Mapped to Entity: Emergency ManagementProject: Cumberland Gap TunnelMapped to Entity: Other EMProject: Cumberland Gap Tunnel

Tunnel Emergency Personnel

Status: Existing

Associated Stakeholder: KYTC District 10

Mapped to Entity: Emergency Personnel Project: Cumberland Gap Tunnel

Tunnel Emergency System Operator

Status: Existing

Associated Stakeholder: KYTC District 10

Mapped to Entity: Emergency System Operator Project: Cumberland Gap Tunnel

Tunnel Roadway Subsystem

Status: Existing

 ${\it Associated Stakeholder:}~KYTC~District~10$

Mapped to Entity: Roadway Subsystem Project: Cumberland Gap Tunnel

Vehicle

Status: Planned

Associated Stakeholder: None

Mapped to Entity: Other VehicleProject: LexingtonMapped to Entity: VehicleProject: LexingtonMapped to Entity: VehicleProject: TRIMARCMapped to Entity: Other VehicleProject: TRIMARC

Weather Service

Status: Existing

Associated Stakeholder: National Weather Service

Mapped to Entity: Weather Service Project: Cumberland Gap Tunnel

Mapped to Entity:Weather ServiceProject:LexingtonMapped to Entity:Weather ServiceProject:STOCMapped to Entity:Weather ServiceProject:TRIMARC

Yellow Pages Service Providers

Status: Planned

Associated Stakeholder: None

Mapped to Entity: Yellow Pages Service Providers Project: Cumberland Gap Tunnel

Mapped to Entity: Yellow Pages Service Providers Project: STOC

SourceElement	DestinationElement	FlowName	FlowStatus
Academic / Research Organizations	CGT Historical Incident Data Repository	archived data product requests	Existing
Academic / Research Organizations	CGT Historical Traffic Data Repository	archived data product requests	Existing
Acoustic detectors	Department of Highways District 2	roadway information system status	Existing
ARTIMIS Archived Data Administrator	ARTIMIS Archived Data Management	archive management requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Archived Data Administrator	archive management data	Planned
ARTIMIS Archived Data Management	ARTIMIS Area 911/CAD Centers	archive requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Area 911/CAD Centers	archive status	Planned
ARTIMIS Archived Data Management	ARTIMIS Area Emergency Response Agencies	archive requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Area Emergency Response Agencies	archive status	Planned
ARTIMIS Archived Data Management	ARTIMIS Emergency Management	archive requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Emergency Management	archive status	Planned
ARTIMIS Archived Data Management	ARTIMIS Information Service Provider	archive requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Information Service Provider	archive status	Planned
ARTIMIS Archived Data Management	ARTIMIS Traffic Management	archive requests	Planned
ARTIMIS Archived Data Management	ARTIMIS Traffic Management	archive status	Planned
ARTIMIS Archived Data Management	Boone County 911/CAD	archive requests	Planned
ARTIMIS Archived Data Management	Boone County 911/CAD	archive status	Planned
ARTIMIS Archived Data Management	City of Cincinnati 911/CAD	archive requests	Planned
ARTIMIS Archived Data Management	City of Cincinnati 911/CAD	archive status	Planned
ARTIMIS Archived Data Management	City of Cincinnati Parking Management	archive requests	Planned
ARTIMIS Archived Data Management	City of Cincinnati Parking Management	archive status	Planned
ARTIMIS Archived Data Management	City of Cincinnati Traffic Management	archive requests	Planned
ARTIMIS Archived Data Management	City of Cincinnati Traffic Management	archive status	Planned
ARTIMIS Archived Data Management	Hamilton County 911/CAD	archive requests	Planned
ARTIMIS Archived Data Management	Hamilton County 911/CAD	archive status	Planned
ARTIMIS Archived Data Management	METRO Transit Dispatch Center	archive requests	Planned
ARTIMIS Archived Data Management	METRO Transit Dispatch Center	archive status	Planned
ARTIMIS Archived Data Management	Other Traffic Management	archive requests	Planned
ARTIMIS Archived Data Management	Other Traffic Management	archive status	Planned
ARTIMIS Archived Data Management	Roadway Subsystem	sensor and surveillance control	Existing
ARTIMIS Archived Data Management	TANK Transit Dispatch Center	archive requests	Planned
ARTIMIS Archived Data Management	TANK Transit Dispatch Center	archive status	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Archived Data Management	emergency archive data	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Emergency Management	incident report	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Emergency Management	incident response coordination	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Information Service Provider	incident information	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Traffic Management	emergency traffic control request	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Traffic Management	incident information	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Traffic Management	incident response status	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Traffic Management	remote surveillance control	Planned
ARTIMIS Area 911/CAD Centers	ARTIMIS Traffic Management	resource request	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Archived Data Management	emergency archive data	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Emergency Management	incident report	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Emergency Management	incident report	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Information Service Provider	incident information	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Traffic Management	emergency traffic control request	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Traffic Management	incident information	Planned
ARTIMIS Area Emergency Response Agencies ARTIMIS Area Emergency Response Agencies	ARTIMIS Traffic Management	incident information	Planned
ARTIMIS Area Emergency Response Agencies ARTIMIS Area Emergency Response Agencies	ARTIMIS Traffic Management	remote surveillance control	Planned
ARTIMIS Area Emergency Response Agencies	ARTIMIS Traffic Management	resource request	Planned
ARTIMIS Area Emergency Response Agencies ARTIMIS Emergency Management	ARTIMIS Traine Management ARTIMIS Archived Data Management	emergency archive data	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
ARTIMIS Emergency Management	ARTIMIS Area 911/CAD Centers	incident report	Planned
ARTIMIS Emergency Management	ARTIMIS Area 911/CAD Centers	incident response coordination	Planned
ARTIMIS Emergency Management	ARTIMIS Area Emergency Response Agencies	incident report	Planned
ARTIMIS Emergency Management	ARTIMIS Area Emergency Response Agencies	incident response coordination	Planned
ARTIMIS Emergency Management	ARTIMIS Freeway Incident Response Teams	emergency dispatch requests	Planned
ARTIMIS Emergency Management	ARTIMIS Freeway Incident Response Teams	incident command information	Planned
ARTIMIS Emergency Management	ARTIMIS Freeway Incident Response Teams	suggested route	Planned
ARTIMIS Emergency Management	ARTIMIS Information Service Provider	incident information	Existing
ARTIMIS Emergency Management	ARTIMIS Traffic Management	emergency traffic control request	Existing
ARTIMIS Emergency Management	ARTIMIS Traffic Management	incident information	Existing
ARTIMIS Emergency Management	ARTIMIS Traffic Management	incident response status	Existing
ARTIMIS Emergency Management	ARTIMIS Traffic Management	remote surveillance control	Existing
ARTIMIS Emergency Management	ARTIMIS Traffic Management	resource request	Existing
ARTIMIS Emergency Management	Boone County 911/CAD	incident report	Planned
ARTIMIS Emergency Management	Boone County 911/CAD	incident response coordination	Planned
ARTIMIS Emergency Management	City of Cincinnati 911/CAD	incident report	Planned
ARTIMIS Emergency Management	City of Cincinnati 911/CAD	incident response coordination	Planned
ARTIMIS Emergency Management	City of Cincinnati Traffic Management	emergency traffic control request	Planned
ARTIMIS Emergency Management	City of Cincinnati Traffic Management	incident information	Planned
ARTIMIS Emergency Management	City of Cincinnati Traffic Management	incident response status	Planned
ARTIMIS Emergency Management	City of Cincinnati Traffic Management	remote surveillance control	Existing
ARTIMIS Emergency Management	City of Cincinnati Traffic Management	resource request	Planned
ARTIMIS Emergency Management	Hamilton County 911/CAD	incident report	Planned
ARTIMIS Emergency Management	Hamilton County 911/CAD	incident response coordination	Planned
ARTIMIS Emergency Management	METRO Transit Dispatch Center	transit emergency coordination data	Planned
ARTIMIS Emergency Management	Other Traffic Management	emergency traffic control request	Planned
ARTIMIS Emergency Management	Other Traffic Management	incident information	Planned
ARTIMIS Emergency Management	Other Traffic Management	incident response status	Planned
ARTIMIS Emergency Management	Other Traffic Management	remote surveillance control	Planned
ARTIMIS Emergency Management	Other Traffic Management	resource request	Planned
ARTIMIS Emergency Management	TANK Transit Dispatch Center	transit emergency coordination data	Planned
ARTIMIS Freeway Incident Response Teams	ARTIMIS Emergency Management	emergency dispatch response	Planned
ARTIMIS Freeway Incident Response Teams	ARTIMIS Emergency Management	emergency vehicle tracking data	Planned
ARTIMIS Freeway Incident Response Teams	ARTIMIS Emergency Management	incident status	Planned
ARTIMIS Information Service Provider	ARTIMIS Archived Data Management	traveler archive data	Planned
ARTIMIS Information Service Provider	ARTIMIS Area 911/CAD Centers	incident information request	Planned
ARTIMIS Information Service Provider	ARTIMIS Area Emergency Response Agencies	incident information request	Planned
ARTIMIS Information Service Provider	ARTIMIS Emergency Management	incident information request	Existing
ARTIMIS Information Service Provider	ARTIMIS Traffic Management	logged special vehicle route	Existing
ARTIMIS Information Service Provider	ARTIMIS Traffic Management	request for traffic information	Existing
ARTIMIS Information Service Provider	ARTIMIS Traffic Management	road network use	Existing
ARTIMIS Information Service Provider	Boone County 911/CAD	incident information request	Planned
ARTIMIS Information Service Provider	City of Cincinnati 911/CAD	incident information request	Planned
ARTIMIS Information Service Provider	City of Cincinnati Parking Management	parking lot data request	Planned
ARTIMIS Information Service Provider	City of Cincinnati Parking Management	parking for data request	Planned
ARTIMIS Information Service Provider	City of Cincinnati Traffic Management	logged special vehicle route	Planned
ARTIMIS Information Service Provider	City of Cincinnati Traffic Management	request for traffic information	Planned
ARTIMIS Information Service Provider	City of Cincinnati Traffic Management	road network use	Planned
ARTIMIS Information Service Provider	Hamilton County 911/CAD	incident information request	Planned
ARTIMIS Information Service Provider ARTIMIS Information Service Provider	METRO Transit Dispatch Center	transit information request	Planned
ARTIMIS Information Service Provider	Other Traffic Management	logged special vehicle route	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
ARTIMIS Information Service Provider	Other Traffic Management	request for traffic information	Planned
ARTIMIS Information Service Provider	Other Traffic Management	road network use	Planned
ARTIMIS Information Service Provider	Remote Traveler Support Kiosks	broadcast information	Planned
ARTIMIS Information Service Provider	Remote Traveler Support Kiosks	traveler information	Planned
ARTIMIS Information Service Provider	Remote Traveler Support Kiosks	trip plan	Planned
ARTIMIS Information Service Provider	Remote Traveler Support Kiosks	yellow pages information	Planned
ARTIMIS Information Service Provider	TANK Transit Dispatch Center	transit information request	Planned
ARTIMIS Traffic Management	ARTIMIS Archived Data Management	traffic archive data	Planned
ARTIMIS Traffic Management	ARTIMIS Area 911/CAD Centers	current network conditions	Planned
ARTIMIS Traffic Management	ARTIMIS Area 911/CAD Centers	emergency traffic control response	Planned
ARTIMIS Traffic Management	ARTIMIS Area 911/CAD Centers	incident information	Planned
ARTIMIS Traffic Management	ARTIMIS Area 911/CAD Centers	incident information request	Planned
ARTIMIS Traffic Management	ARTIMIS Area 911/CAD Centers	resource deployment status	Planned
ARTIMIS Traffic Management	ARTIMIS Area Emergency Response Agencies	current network conditions	Planned
ARTIMIS Traffic Management	ARTIMIS Area Emergency Response Agencies	emergency traffic control response	Planned
ARTIMIS Traffic Management	ARTIMIS Area Emergency Response Agencies	incident information	Planned
ARTIMIS Traffic Management	ARTIMIS Area Emergency Response Agencies	incident information request	Planned
ARTIMIS Traffic Management	ARTIMIS Area Emergency Response Agencies	resource deployment status	Planned
ARTIMIS Traffic Management	ARTIMIS Emergency Management	current network conditions	Existing
ARTIMIS Traffic Management	ARTIMIS Emergency Management	emergency traffic control response	Existing
ARTIMIS Traffic Management	ARTIMIS Emergency Management	incident information	Existing
ARTIMIS Traffic Management	ARTIMIS Emergency Management	incident information request	Existing
ARTIMIS Traffic Management	ARTIMIS Emergency Management	resource deployment status	Existing
ARTIMIS Traffic Management	ARTIMIS Information Service Provider	request fare and price information	Existing
ARTIMIS Traffic Management	ARTIMIS Information Service Provider	traffic information	Existing
ARTIMIS Traffic Management	Boone County 911/CAD	current network conditions	Planned
ARTIMIS Traffic Management	Boone County 911/CAD	emergency traffic control response	Planned
ARTIMIS Traffic Management	Boone County 911/CAD	incident information	Planned
ARTIMIS Traffic Management	Boone County 911/CAD	incident information request	Planned
ARTIMIS Traffic Management	Boone County 911/CAD	resource deployment status	Planned
ARTIMIS Traffic Management	City of Cincinnati 911/CAD	current network conditions	Planned
ARTIMIS Traffic Management	City of Cincinnati 911/CAD	emergency traffic control response	Planned
ARTIMIS Traffic Management	City of Cincinnati 911/CAD	incident information	Planned
ARTIMIS Traffic Management	City of Cincinnati 911/CAD	incident information request	Planned
ARTIMIS Traffic Management	City of Cincinnati 911/CAD	resource deployment status	Planned
ARTIMIS Traffic Management	City of Cincinnati Traffic Management	traffic control coordination	Planned
ARTIMIS Traffic Management	City of Cincinnati Traffic Management	traffic information coordination	Planned
ARTIMIS Traffic Management	Hamilton County 911/CAD	current network conditions	Planned
ARTIMIS Traffic Management	Hamilton County 911/CAD	emergency traffic control response	Planned
ARTIMIS Traffic Management	Hamilton County 911/CAD	incident information	Planned
ARTIMIS Traffic Management	Hamilton County 911/CAD	incident information request	Planned
ARTIMIS Traffic Management	Hamilton County 911/CAD	resource deployment status	Planned
ARTIMIS Traffic Management	METRO Transit Dispatch Center	reguest transit information	Planned
ARTIMIS Traffic Management	METRO Transit Dispatch Center	traffic information for transit	Planned
ARTIMIS Traffic Management	Other Traffic Management	traffic control coordination	Planned
ARTIMIS Traffic Management	Other Traffic Management	traffic information coordination	Planned
ARTIMIS Traffic Management	Roadway Subsystem	freeway control data	Existing
ARTIMIS Traffic Management	Roadway Subsystem	roadway information system data	Existing
ARTIMIS Traffic Management	Roadway Subsystem	sensor and surveillance control	Existing
ARTIMIS Traffic Management	STOC Traffic Management	traffic control coordination	Planned
ARTIMIS Traffic Management	STOC Traffic Management	traffic information coordination	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
ARTIMIS Traffic Management	TANK Transit Dispatch Center	request transit information	Planned
ARTIMIS Traffic Management	TANK Transit Dispatch Center	traffic information for transit	Planned
Boone County 911/CAD	ARTIMIS Archived Data Management	emergency archive data	Planned
Boone County 911/CAD	ARTIMIS Emergency Management	incident report	Planned
Boone County 911/CAD	ARTIMIS Emergency Management	incident response coordination	Planned
Boone County 911/CAD	ARTIMIS Information Service Provider	incident information	Planned
Boone County 911/CAD	ARTIMIS Traffic Management	emergency traffic control request	Planned
Boone County 911/CAD	ARTIMIS Traffic Management	incident information	Planned
Boone County 911/CAD	ARTIMIS Traffic Management	incident response status	Planned
Boone County 911/CAD	ARTIMIS Traffic Management	remote surveillance control	Planned
Boone County 911/CAD	ARTIMIS Traffic Management	resource request	Planned
Bridge monitoring camera	Department of Highways District 11	traffic images	Existing
CGT Area Emergency Response Agencies	CGT Historical Incident Data Repository	emergency archive data	Existing
CGT Area Emergency Response Agencies	CGT Regional GIS Agency	map update request	Planned
CGT Area Emergency Response Agencies	Commercial Fleet Management	HAZMAT information request	Planned
CGT Area Emergency Response Agencies	Cumberland Gap Traffic Management Center	emergency traffic control request	Planned
CGT Area Emergency Response Agencies	Cumberland Gap Traffic Management Center	incident information	Planned
CGT Area Emergency Response Agencies	Cumberland Gap Traffic Management Center	incident response status	Planned
CGT Area Emergency Response Agencies	Cumberland Gap Traffic Management Center	resource request	Planned
CGT Area Emergency Response Agencies	Personal Information Access	emergency acknowledge	Existing
CGT Construction/Maintenance Central Repository	CGT Historical Traffic Data Repository	construction and maintenance archive data	Planned
CGT Construction/Maintenance Central Repository	Cumberland Gap Traffic Management Center	equipment maintenance status	Planned
CGT Construction/Maintenance Central Repository	Cumberland Gap Traffic Management Center	maintenance resource response	Planned
CGT Construction/Maintenance Central Repository	Cumberland Gap Traffic Management Center	work zone status	Planned
CGT Historical Incident Data Repository	Academic / Research Organizations	archived data products	Existing
CGT Historical Incident Data Repository	CGT Area Emergency Response Agencies	archive requests	Planned
CGT Historical Incident Data Repository	CGT Area Emergency Response Agencies	archive status	Planned
CGT Historical Incident Data Repository	CGTMC Archive Data Administrator	archive management data	Planned
CGT Historical Incident Data Repository	Cumberland Gap Traffic Management Center	archive requests	Planned
CGT Historical Incident Data Repository	Cumberland Gap Traffic Management Center	archive status	Planned
CGT Historical Incident Data Repository	Fatal Analysis Reporting System	government reporting system data	Existing
CGT Historical Incident Data Repository	Kentucky Historical Incident Data Repository	archive coordination	Planned
CGT Historical Incident Data Repository	Tennessee Historical Incident Data Repository	archive coordination	Planned
CGT Historical Incident Data Repository	Tunnel Emergency Management Center	archive requests	Planned
CGT Historical Incident Data Repository	Tunnel Emergency Management Center	archive status	Planned
CGT Historical Traffic Data Repository	Academic / Research Organizations	archived data products	Existing
CGT Historical Traffic Data Repository	CGT Construction/Maintenance Central Repository	archive requests	Planned
CGT Historical Traffic Data Repository	CGT Construction/Maintenance Central Repository	archive status	Planned
CGT Historical Traffic Data Repository	CGTMC Archive Data Administrator	archive management data	Planned
CGT Historical Traffic Data Repository	Cumberland Gap Traffic Management Center	archive requests	Planned
CGT Historical Traffic Data Repository	Cumberland Gap Traffic Management Center	archive status	Planned
CGT Historical Traffic Data Repository	Highway Performance Monitoring System	government reporting system data	Existing
CGT Historical Traffic Data Repository	Kentucky Historical Traffic Data Repository	archive coordination	Planned
CGT Historical Traffic Data Repository	Roadway Subsystem	sensor and surveillance control	Planned
CGT Historical Traffic Data Repository	RWIS Stations	sensor and surveillance control	Planned
CGT Historical Traffic Data Repository	Tennessee Historical Traffic Data Repository	archive coordination	Planned
CGT Historical Traffic Data Repository	Tunnel Roadway Subsystem	sensor and surveillance control	Planned
CGT Regional GIS Agency	CGT Area Emergency Response Agencies	map updates	Planned
CGT Regional GIS Agency	Cumberland Gap Information Service Provider	map updates	Planned
CGT Regional GIS Agency	Cumberland Gap Information Service Provider Cumberland Gap Traffic Management Center	map updates	Planned
CGT Regional GIS Agency	Remote Traveler Support Kiosks	map updates	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
CGT Regional GIS Agency	Tunnel Emergency Management Center	map updates	Planned
CGTMC Archive Data Administrator	CGT Historical Incident Data Repository	archive management requests	Planned
CGTMC Archive Data Administrator	CGT Historical Traffic Data Repository	archive management requests	Planned
CGTMC Operators / Dispatcher	Cumberland Gap Traffic Management Center	traffic operator inputs	Planned
City of Cincinnati 911/CAD	ARTIMIS Archived Data Management	emergency archive data	Planned
City of Cincinnati 911/CAD	ARTIMIS Emergency Management	incident report	Planned
City of Cincinnati 911/CAD	ARTIMIS Emergency Management	incident response coordination	Planned
City of Cincinnati 911/CAD	ARTIMIS Information Service Provider	incident information	Planned
City of Cincinnati 911/CAD	ARTIMIS Traffic Management	emergency traffic control request	Planned
City of Cincinnati 911/CAD	ARTIMIS Traffic Management	incident information	Planned
City of Cincinnati 911/CAD	ARTIMIS Traffic Management	incident response status	Planned
City of Cincinnati 911/CAD	ARTIMIS Traffic Management	remote surveillance control	Planned
City of Cincinnati 911/CAD	ARTIMIS Traffic Management	resource request	Planned
City of Cincinnati Parking Management	ARTIMIS Archived Data Management	parking archive data	Planned
City of Cincinnati Parking Management	ARTIMIS Information Service Provider	parking information	Planned
City of Cincinnati Parking Management	ARTIMIS Information Service Provider	parking lot reservation confirmation	Planned
City of Cincinnati Traffic Management	ARTIMIS Archived Data Management	traffic archive data	Planned
City of Cincinnati Traffic Management	ARTIMIS Emergency Management	current network conditions	Planned
City of Cincinnati Traffic Management	ARTIMIS Emergency Management	emergency traffic control response	Planned
City of Cincinnati Traffic Management	ARTIMIS Emergency Management	incident information	Planned
City of Cincinnati Traffic Management	ARTIMIS Emergency Management	incident information request	Planned
City of Cincinnati Traffic Management	ARTIMIS Emergency Management	resource deployment status	Planned
City of Cincinnati Traffic Management	ARTIMIS Information Service Provider	request fare and price information	Planned
City of Cincinnati Traffic Management	ARTIMIS Information Service Provider	traffic information	Planned
City of Cincinnati Traffic Management	ARTIMIS Traffic Management	traffic control coordination	Planned
City of Cincinnati Traffic Management	ARTIMIS Traffic Management	traffic information coordination	Planned
City of Cincinnati Traffic Management	Roadway Subsystem	roadway information system data	Planned
City of Cincinnati Traffic Management	Roadway Subsystem	sensor and surveillance control	Existing
City of Cincinnati Traffic Management	Roadway Subsystem	signal control data	Existing
Commercial Fleet Management	CGT Area Emergency Response Agencies	HAZMAT information	Planned
Commercial Fleet Management	Commercial Vehicle Administration	credential application	Existing
Commercial Fleet Management	Commercial Vehicle Administration	information request	Existing
Commercial Fleet Management	Commercial Vehicle Administration	tax filing, audit data	Existing
Commercial Fleet Management	Payment Instrument	request for payment	Existing
Commercial Fleet Management	Tunnel Emergency Management Center	HAZMAT information	Planned
Commercial Vehicle	Commercial Vehicle Inspection Facility	CVO weight and presence	Existing
Commercial Vehicle	Remote Monitoring System	CVO weight and presenceremote	Existing
Commercial Vehicle Administration	Commercial Fleet Management	activity reports	Existing
Commercial Vehicle Administration	Commercial Fleet Management	electronic credentials	Existing
Commercial Vehicle Administration	Commercial Fleet Management	Tax default notification	Existing
Commercial Vehicle Administration	Commercial Vehicle Inspection Facility	credentials information	Existing
Commercial Vehicle Administration	Commercial Vehicle Inspection Facility	CVO database update	Existing
Commercial Vehicle Administration	Commercial Vehicle Inspection Facility Commercial Vehicle Inspection Facility	safety information	Existing
Commercial Vehicle Administration	Commercial Vehicle Inspection Facility Commercial Vehicle Inspection Facility	System configuration	Existing
Commercial Vehicle Administration	CVO Information Requestor	credentials and safety information response	Existing
Commercial Vehicle Administration	Financial Institution	payment request	Existing
Commercial Vehicle Administration	IRP Clearinghouse	CVAS information exchange	Existing
Commercial Vehicle Administration Commercial Vehicle Administration	MARS	Accounting Entry	Existing
	Other CVAS	CVAS information exchange	
Commercial Vehicle Administration			Planned
Commercial Vehicle Administration	RPC SAFER	CVAS information exchange CVAS information exchange	Existing Existing

SourceElement	DestinationElement	FlowName	FlowStatus
Commercial Vehicle Administration	Tunnel Electronic Tag Reader	CVO database update	Planned
Commercial Vehicle Inspection Facility	Commercial Vehicle Administration	credentials information request	Existing
Commercial Vehicle Inspection Facility	Commercial Vehicle Administration	roadside log update	Existing
Commercial Vehicle Inspection Facility	Commercial Vehicle Administration	safety information request	Existing
Commercial Vehicle Inspection Facility	Commercial Vehicle Driver	CVO Pull in Message	Existing
Commercial Vehicle Inspection Facility	Commercial Vehicle Subsystem	pass/pull-in	Existing
Commercial Vehicle Inspection Facility	Commercial Vehicle Subsystem	screening request	Existing
Commercial Vehicle Inspection Facility	CVO Inspector	CVO inspector information	Existing
Commercial Vehicle Subsystem	Commercial Vehicle Driver	CVO Pull in Message	Existing
Commercial Vehicle Subsystem	Commercial Vehicle Inspection Facility	screening data	Existing
Commercial Vehicle Subsystem	Tunnel Electronic Tag Reader	screening data	Planned
Commonwealth EOC	Kentucky State Police	incident report	Existing
Commonwealth EOC	Kentucky State Police	incident response coordination	Existing
Commonwealth EOC	KVE Emergency Management	incident report	Existing
Commonwealth EOC	KVE Emergency Management	incident response coordination	Existing
Commonwealth EOC	STOC Information Service Provider	incident information	Existing
Commonwealth EOC	STOC Information Service Provider	logged special vehicle route-2	Existing
Commonwealth EOC	STOC Traffic Management	incident information	Existing
Cumberland Gap Information Service Provider	CGT Regional GIS Agency	map update request	Planned
Cumberland Gap Information Service Provider	Cumberland Gap ISP Operator	ISP operating parameters	Planned
Cumberland Gap Information Service Provider	Cumberland Gap Traffic Management Center	logged special vehicle route	Planned
Cumberland Gap Information Service Provider	Cumberland Gap Traffic Management Center	request for traffic information	Planned
Cumberland Gap Information Service Provider	Cumberland Gap Traffic Management Center	road network use	Planned
Cumberland Gap Information Service Provider	Media	traveler information for media	Planned
Cumberland Gap Information Service Provider	Personal Information Access	traveler information	Planned
Cumberland Gap Information Service Provider	Personal Information Access	yellow pages information	Planned
Cumberland Gap Information Service Provider	Private commercial information providers	ISP coordination	Planned
Cumberland Gap Information Service Provider	Remote Traveler Support Kiosks	traveler information	Planned
Cumberland Gap Information Service Provider	Remote Traveler Support Kiosks	yellow pages information	Planned
Cumberland Gap Information Service Provider	STOC Information Service Provider	ISP coordination	Planned
Cumberland Gap Information Service Provider	Yellow Pages Service Providers	provider profile confirm	Planned
Cumberland Gap Information Service Provider	Yellow Pages Service Providers	travel service request	Planned
Cumberland Gap ISP Operator	Cumberland Gap Information Service Provider	ISP operating parameter updates	Planned
Cumberland Gap Traffic Management Center	CGT Area Emergency Response Agencies	current network conditions	Planned
Cumberland Gap Traffic Management Center	CGT Area Emergency Response Agencies	emergency traffic control response	Planned
Cumberland Gap Traffic Management Center	CGT Area Emergency Response Agencies	incident information	Planned
Cumberland Gap Traffic Management Center	CGT Area Emergency Response Agencies	incident information request	Planned
Cumberland Gap Traffic Management Center	CGT Area Emergency Response Agencies	resource deployment status	Planned
Cumberland Gap Traffic Management Center	CGT Construction/Maintenance Central Repository	closure coordination	Planned
Cumberland Gap Traffic Management Center	CGT Construction/Maintenance Central Repository	maintenance resource request	Planned
Cumberland Gap Traffic Management Center	CGT Construction/Maintenance Central Repository	traffic equipment status	Planned
Cumberland Gap Traffic Management Center	CGT Historical Incident Data Repository	traffic archive data	Planned
Cumberland Gap Traffic Management Center	CGT Historical Traffic Data Repository	traffic archive data	Planned
Cumberland Gap Traffic Management Center	CGT Regional GIS Agency	map update request	Planned
Cumberland Gap Traffic Management Center	CGTMC Operators / Dispatcher	traffic operator data	Planned
Cumberland Gap Traffic Management Center	Cumberland Gap Information Service Provider	request fare and price information	Planned
Cumberland Gap Traffic Management Center	Cumberland Gap Information Service Provider Cumberland Gap Information Service Provider	traffic information	Planned
Cumberland Gap Traffic Management Center	Event Promoters	event confirmation	Planned
Cumberland Gap Traffic Management Center	Media	traffic information for media	Planned
Cumberland Gap Traffic Management Center	Roadway Subsystem	freeway control data	Planned
Cumberland Gap Traffic Management Center	Roadway Subsystem	roadway information system data	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
Cumberland Gap Traffic Management Center	Roadway Subsystem	sensor and surveillance control	Planned
Cumberland Gap Traffic Management Center	RWIS Stations	freeway control data	Planned
Cumberland Gap Traffic Management Center	RWIS Stations	sensor and surveillance control	Planned
Cumberland Gap Traffic Management Center	Tunnel Emergency Management Center	current network conditions	Planned
Cumberland Gap Traffic Management Center	Tunnel Emergency Management Center	emergency traffic control response	Planned
Cumberland Gap Traffic Management Center	Tunnel Emergency Management Center	incident information	Planned
Cumberland Gap Traffic Management Center	Tunnel Emergency Management Center	incident information request	Planned
Cumberland Gap Traffic Management Center	Tunnel Emergency Management Center	resource deployment status	Planned
Cumberland Gap Traffic Management Center	Tunnel Roadway Subsystem	freeway control data	Planned
Cumberland Gap Traffic Management Center	Tunnel Roadway Subsystem	roadway information system data	Planned
Cumberland Gap Traffic Management Center	Tunnel Roadway Subsystem	sensor and surveillance control	Planned
CVO Information Requestor	Commercial Vehicle Administration	credentials and safety information request	Existing
CVO Inspector	Commercial Vehicle Inspection Facility	CVC override mode	Existing
CVO Inspector	Commercial Vehicle Inspection Facility	CVO inspector input	Existing
CVO Inspector	Commercial Vehicle Inspection Facility	System configuration	Existing
Department of Highways District 1	Roadway Subsystem	signal control data	Existing
Department of Highways District 11	Anti-Icing System	freeway control data	Existing
Department of Highways District 11	Anti-Icing System	Treatment Control Data	Existing
Department of Highways District 11	Bridge monitoring camera	freeway control data	Existing
Department of Highways District 11	Bridge monitoring camera	sensor and surveillance control	Existing
Department of Highways District 2	Acoustic detectors	Status Request	Existing
Department of Highways District 2	EIS wide beam radar	Status Request	Existing
Department of Highways District 2	Fiber Optic Message Sign	Status Request	Existing
Department of Highways District 2	Roadway Subsystem	signal control data	Existing
Department of Highways District 3	Roadway Subsystem	signal control data	Existing
Department of Highways District 8	Roadway Subsystem	signal control data	Existing
Department of Highways District 9	Roadway Subsystem	signal control data	Existing
EIS wide beam radar	Department of Highways District 2	roadway information system status	Existing
Emergency Vehicle	Fire and Emergency Services Personnel	dispatch information	Existing
Emergency Vehicle	Fire and Emergency Services Personnel	incident command information presentation	Existing
Emergency Vehicle	KVE Emergency Management	incident status	Existing
Emergency Vehicle	Lexington Emergency Management Center	emergency dispatch response	Existing
Emergency Vehicle	Lexington Emergency Management Center Lexington Emergency Management Center	emergency vehicle tracking data	Planned
Emergency Vehicle	Lexington Emergency Management Center Lexington Emergency Management Center	incident command request	Existing
Emergency Vehicle	Lexington Emergency Management Center Lexington Emergency Management Center	incident status	Existing
Emergency Vehicle	Police Personnel	dispatch information	Planned
Emergency Vehicle Emergency Vehicle	Police Personnel	incident command information presentation	Existing
<u> </u>		incident status	Existing
Emergency Vehicle Emergency Vehicle	TRIMARC Area Emergency Response Agencies		Existing
•	Tunnel Emergency Management Center Tunnel Emergency Management Center	incident command request	Existing
Emergency Vehicle		incident status	
Emergency Vehicle	Tunnel Emergency Personnel	incident command information presentation	Existing
Emergency Vehicle Personnel	Fleming County Dispatch Center	Vehicle location data	Existing
Event Promoters	Cumberland Gap Traffic Management Center	event plans	Planned
Event Promoters	Lexington Emergency Management Center	event plans	Existing
Event Promoters	Lexington Traffic Management	event plans	Existing
Event Promoters	STOC Traffic Management	event plans	Existing
Fiber Optic Message Sign	Basic Vehicle	broadcast advisories	Existing
Fiber Optic Message Sign	Department of Highways District 2	roadway information system status	Existing
Financial Institution	Commercial Vehicle Administration	transaction status	Existing
Financial Institution	Lexington Transit Management Center	transaction status	Planned
Financial Institution	Private commercial information providers	transaction status	Planned

Emergency Vehicle Roadway Subsystem Roadway Subsystem	emergency personnel inputs local signal preemption request	Existing Existing
		Fxisting
Roadway Subsystem		LAISHING
	signal preemption request	Existing
Lexington Archived Data Management Center	government reporting data receipt	Existing
ARTIMIS Archived Data Management	emergency archive data	Planned
ARTIMIS Emergency Management	incident report	Planned
ARTIMIS Emergency Management		Planned
ARTIMIS Information Service Provider	incident information	Planned
ARTIMIS Traffic Management	emergency traffic control request	Planned
	incident information	Planned
	incident response status	Planned
ARTIMIS Traffic Management	remote surveillance control	Planned
	resource request	Planned
	traffic control coordination	Planned
	traffic information coordination	Planned
	closure coordination-2	Existing
		Planned
		Planned
		Existing
		Planned
		Existing
<u> </u>	·	Existing
STOC Traffic Management		Existing
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	ARTIMIS Emergency Management ARTIMIS Information Service Provider ARTIMIS Traffic Management ARTIMIS Traffic Management ARTIMIS Traffic Management	ARTIMIS Emergency Management incident response coordination ARTIMIS Information Service Provider incident information incident Informat

SourceElement	DestinationElement	FlowName	FlowStatus
Lexington Archived Data Management Center	Weather Service	archive status	Existing
Lexington Archived Data User Systems	Lexington Archived Data Management Center	archive analysis requests	Existing
Lexington Archived Data User Systems	Lexington Archived Data Management Center	archived data product requests	Existing
Lexington Emergency Management Center	Emergency Vehicle	emergency dispatch requests	Existing
Lexington Emergency Management Center	Emergency Vehicle	incident command information	Existing
Lexington Emergency Management Center	Emergency Vehicle	suggested route	Existing
Lexington Emergency Management Center	Event Promoters	event confirmation	Existing
Lexington Emergency Management Center	Lexington Emergency Management Center Personnel	emergency operations status	Existing
Lexington Emergency Management Center	Lexington Traffic Management	incident information	Existing
Lexington Emergency Management Center	Lexington Traffic Management	incident response status	Existing
Lexington Emergency Management Center	Lexington Traffic Management	remote surveillance control	Existing
Lexington Emergency Management Center	Lexington Traffic Management	resource request	Existing
Lexington Emergency Management Center	Lexington Transit Management Center	transit emergency coordination data	Existing
Lexington Emergency Management Center	Media	incident information for media	Existing
Lexington Emergency Management Center	Traffic Information Network	incident information	Existing
Lexington Emergency Management Center Personnel	Lexington Emergency Management Center	emergency operations request	Existing
Lexington TMC Operations Personnel	Lexington Traffic Management	ISP operating parameter updates	Existing
Lexington TMC Operations Personnel	Lexington Traffic Management	traffic operator inputs	Existing
Lexington TMC Operations Personnel	Traffic Information Network	ISP operating parameter updates	Existing
Lexington Traffic Management	Event Promoters	event confirmation	Existing
Lexington Traffic Management	Lexington Archived Data Management Center	traffic archive data	Existing
Lexington Traffic Management	Lexington Archived Data Management Center	traveler archive data	Existing
Lexington Traffic Management	Lexington Emergency Management Center	current network conditions	Existing
Lexington Traffic Management	Lexington Emergency Management Center	incident information	Existing
Lexington Traffic Management	Lexington Emergency Management Center	incident information request	Existing
Lexington Traffic Management	Lexington Emergency Management Center	resource deployment status	Existing
Lexington Traffic Management	Lexington TMC Operations Personnel	ISP operating parameters	Existing
Lexington Traffic Management	Lexington TMC Operations Personnel	traffic operator data	Existing
Lexington Traffic Management	Lexington Transit Management Center	demand responsive transit request	Existing
Lexington Traffic Management	Lexington Transit Management Center	request transit information	Planned
Lexington Traffic Management	Lexington Transit Management Center	traffic information for transit	Existing
Lexington Traffic Management	Lexington Transit Management Center	transit information request	Planned
Lexington Traffic Management	LFUCG Division of Streets and Roads	closure coordination	Existing
Lexington Traffic Management	LFUCG Division of Streets and Roads	maintenance resource request	Existing
Lexington Traffic Management	LFUCG Division of Streets and Roads	traffic equipment status	Existing
Lexington Traffic Management	Media	traffic information for media	Existing
Lexington Traffic Management	Media	traveler information for media	Existing
Lexington Traffic Management	Other Traffic Management	traffic control coordination	Planned
Lexington Traffic Management	Other Traffic Management	traffic information coordination	Existing
Lexington Traffic Management	Personal Information Access	broadcast information	Existing
Lexington Traffic Management	Personal Information Access	traveler information	Existing
Lexington Traffic Management	Remote Traveler Support Kiosks	broadcast information	Existing
Lexington Traffic Management	Remote Traveler Support Kiosks	traveler information	Existing
Lexington Traffic Management	Roadway Subsystem	roadway information system data	Existing
Lexington Traffic Management	Roadway Subsystem	sensor and surveillance control	Existing
Lexington Traffic Management	Roadway Subsystem	signal control data	Planned
Lexington Traffic Management	STOC Traffic Management	traffic control coordination	Planned
Lexington Traffic Management	STOC Traffic Management	traffic information coordination	Planned
Lexington Traffic Management	Traffic Information Network	ISP coordination	Existing
Lexington Traffic Management	Traffic Information Network	traffic information	Existing
Lexington Traffic Management	Traffic Information Network Personnel	ISP operating parameters	Existing

SourceElement	DestinationElement	FlowName	FlowStatus
Lexington Traffic Management	Vehicle	broadcast information	Existing
Lexington Traffic Management	Vehicle	traveler information	Existing
Lexington Transit Management Center	Financial Institution	payment request	Planned
Lexington Transit Management Center	Lexington Emergency Management Center	transit emergency data	Existing
Lexington Transit Management Center	Lexington Police Department	violation notification	Existing
Lexington Transit Management Center	Lexington Traffic Management	demand responsive transit plan	Existing
Lexington Transit Management Center	Lexington Traffic Management	transit and fare schedules	Planned
Lexington Transit Management Center	Lexington Traffic Management	transit incident information	Existing
Lexington Transit Management Center	Lexington Traffic Management	transit request confirmation	Existing
Lexington Transit Management Center	Lexington Transit Mgmt. Center Personnel	transit operations planning data	Existing
Lexington Transit Management Center	Lexington Transit Mgmt. Center Personnel	transit operator display	Existing
Lexington Transit Management Center	Media	transit incidents for media	Existing
Lexington Transit Management Center	Media	transit information for media	Existing
Lexington Transit Management Center	Remote Traveler Support Kiosks	transit fare payment responses	Planned
Lexington Transit Management Center	Remote Traveler Support Kiosks	transit traveler information	Planned
Lexington Transit Management Center	Traffic Information Network	demand responsive transit plan	Existing
Lexington Transit Management Center	Traffic Information Network	transit and fare schedules	Planned
Lexington Transit Management Center	Traffic Information Network	transit incident information	Existing
Lexington Transit Management Center	Traffic Information Network	transit request confirmation	Existing
Lexington Transit Management Center	Transit Driver	route assignment	Planned
Lexington Transit Management Center	Transit Vehicle	bad tag list	Planned
Lexington Transit Management Center	Transit Vehicle	driver instructions	Planned
Lexington Transit Management Center	Transit Vehicle	fare management information	Planned
Lexington Transit Management Center	Transit Vehicle	transit schedule information	Existing
Lexington Transit Management Center	Transit Vehicle	transit traveler information	Planned
Lexington Transit Mgmt. Center Personnel	Lexington Transit Management Center	transit fleet manager inputs	Existing
Lexington Transit Mgmt. Center Personnel	Lexington Transit Management Center	transit operator management data	Planned
LFUCG Division of Streets and Roads	Lexington Traffic Management	equipment maintenance status	Existing
LFUCG Division of Streets and Roads	Lexington Traffic Management	maintenance resource response	Existing
LFUCG Division of Streets and Roads	Lexington Traffic Management	work zone status	Existing
Location Data Source	Vehicle	position fix	Planned
MCMIS	Commercial Vehicle Administration	CVAS information exchange	Existing
Media	Cumberland Gap Information Service Provider	external reports	Planned
Media	Cumberland Gap Information Service Provider	media information request	Planned
Media	Cumberland Gap Traffic Management Center	external reports	Planned
Media	Cumberland Gap Traffic Management Center	media information request	Planned
Media	Lexington Emergency Management Center	media information request	Existing
Media	Lexington Traffic Management	external reports	Existing
Media	Lexington Traffic Management	media information request	Existing
Media	Lexington Transit Management Center	media information request	Existing
Media	Traffic Information Network	media information request	Existing
METRO Transit Dispatch Center	ARTIMIS Archived Data Management	transit archive data	Planned
METRO Transit Dispatch Center	ARTIMIS Information Service Provider	demand responsive transit plan	Planned
METRO Transit Dispatch Center METRO Transit Dispatch Center	ARTIMIS Information Service Provider ARTIMIS Information Service Provider	transit and fare schedules	Planned
METRO Transit Dispatch Center METRO Transit Dispatch Center	ARTIMIS Information Service Provider ARTIMIS Information Service Provider	transit and lare scriedules	Planned
METRO Transit Dispatch Center METRO Transit Dispatch Center	ARTIMIS Information Service Provider	transit request confirmation	Planned
METRO Transit Dispatch Center METRO Transit Dispatch Center	ARTIMIS Triaffic Management	transit request confirmation	Planned
Nashville Traffic Management	STOC Traffic Management	traffic control coordination	Planned
Nashville Traffic Management Nashville Traffic Management	STOC Traffic Management	traffic control coordination	
	Commercial Vehicle Administration	CVAS information exchange	Planned Planned
Other CVAS			

SourceElement	DestinationElement	FlowName	FlowStatus
Other EM	TRIMARC Area Emergency Response Agencies	incident response coordination	Existing
Other Information Service Providers	Private commercial information providers	ISP coordination	Planned
Other Traffic Management	ARTIMIS Archived Data Management	traffic archive data	Planned
Other Traffic Management	ARTIMIS Emergency Management	current network conditions	Planned
Other Traffic Management	ARTIMIS Emergency Management	emergency traffic control response	Planned
Other Traffic Management	ARTIMIS Emergency Management	incident information	Planned
Other Traffic Management	ARTIMIS Emergency Management	incident information request	Planned
Other Traffic Management	ARTIMIS Emergency Management	resource deployment status	Planned
Other Traffic Management	ARTIMIS Information Service Provider	request fare and price information	Planned
Other Traffic Management	ARTIMIS Information Service Provider	traffic information	Planned
Other Traffic Management	ARTIMIS Traffic Management	traffic control coordination	Planned
Other Traffic Management	ARTIMIS Traffic Management	traffic information coordination	Planned
Other Traffic Management	Lexington Traffic Management	traffic control coordination	Planned
Other Traffic Management	Lexington Traffic Management	traffic information coordination	Existing
Other Traffic Management	Roadway Subsystem	roadway information system data	Planned
Other Traffic Management	Roadway Subsystem	sensor and surveillance control	Existing
Other Traffic Management	Roadway Subsystem	signal control data	Existing
Paducah Fire Stations	Roadway Subsystem	signal preemption request	Existing
Payment Instrument	Commercial Fleet Management	payment	Existing
Payment Instrument	Remote Traveler Support Kiosks	payment	Existing
Payment Instrument	Transit Vehicle	payment	Planned
Pedestrians	Roadway Subsystem	crossing call	Existing
Personal Information Access	CGT Area Emergency Response Agencies	emergency notification	Existing
Personal Information Access	Cumberland Gap Information Service Provider	traveler profile	Planned
Personal Information Access	Cumberland Gap Information Service Provider	traveler request	Planned
Personal Information Access	Cumberland Gap Information Service Provider	yellow pages request	Planned
Personal Information Access	Lexington Traffic Management	traveler request	Existing
Personal Information Access	Lexington Transit Management Center	transit information user request	Existing
Personal Information Access	Payment Instrument	request for payment	Existing
Personal Information Access	Private commercial information providers	yellow pages request	Planned
Personal Information Access	STOC Information Service Provider	traveler request	Existing
Personal Information Access	Traffic Information Network	traveler request	Existing
Personal Information Access	Traveler	traveler interface updates	Planned
Personal Information Access	TRIMARC Information Service Provider	traveler request	Existing
Personal Information Access	Tunnel Emergency Management Center	emergency notification	Planned
Police Personnel	Emergency Vehicle	emergency personnel inputs	Planned
Private commercial information providers	Cumberland Gap Information Service Provider	ISP coordination	Planned
Private commercial information providers	Financial Institution	payment request	Planned
Private commercial information providers	Other Information Service Providers	ISP coordination	Planned
Private commercial information providers	Personal Information Access	yellow pages information	Planned
Private commercial information providers	Yellow Pages Service Providers	travel service request	Planned
Remote Monitoring System	Commercial Vehicle Inspection Facility	Vehicle Images	Existing
Remote Traveler Support Kiosks	ARTIMIS Information Service Provider	traveler request	Planned
Remote Traveler Support Klosks	CGT Regional GIS Agency	map update request	Planned
Remote Traveler Support Klosks	Cumberland Gap Information Service Provider	traveler request	Planned
Remote Traveler Support Klosks	Cumberland Gap Information Service Provider	yellow pages request	Planned
Remote Traveler Support Riosks	Lexington Traffic Management	traveler request	Existing
Remote Traveler Support Riosks	Lexington Transit Management Center	secure area surveillance data	Existing
Remote Traveler Support Riosks	Lexington Transit Management Center Lexington Transit Management Center	transit fare payment requests	Planned
Remote Traveler Support Klosks	Lexington Transit Management Center Lexington Transit Management Center	transit information user request	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
Remote Traveler Support Kiosks	Traffic Information Network	traveler request	Existing
Remote Traveler Support Kiosks	Transit User	transit user fare status	Planned
Remote Traveler Support Kiosks	Transit User	transit user outputs	Planned
Remote Traveler Support Kiosks	Traveler	traveler interface updates	Planned
Roadway Subsystem	ARTIMIS Archived Data Management	roadside archive data	Planned
Roadway Subsystem	ARTIMIS Traffic Management	environmental conditions	Planned
Roadway Subsystem	ARTIMIS Traffic Management	fault reports	Existing
Roadway Subsystem	ARTIMIS Traffic Management	freeway control status	Existing
Roadway Subsystem	ARTIMIS Traffic Management	incident data	Existing
Roadway Subsystem	ARTIMIS Traffic Management	request for right-of-way	Existing
Roadway Subsystem	ARTIMIS Traffic Management	roadway information system status	Existing
Roadway Subsystem	ARTIMIS Traffic Management	signal control status	Planned
Roadway Subsystem	ARTIMIS Traffic Management	traffic flow	Existing
Roadway Subsystem	ARTIMIS Traffic Management	traffic images	Existing
Roadway Subsystem	Basic Vehicle	broadcast advisories	Planned
Roadway Subsystem	CGT Historical Traffic Data Repository	roadside archive data	Planned
Roadway Subsystem	City of Cincinnati Traffic Management	fault reports	Existing
Roadway Subsystem	City of Cincinnati Traffic Management	request for right-of-way	Planned
Roadway Subsystem	City of Cincinnati Traffic Management	roadway information system status	Planned
Roadway Subsystem	City of Cincinnati Traffic Management	signal control status	Existing
Roadway Subsystem	City of Cincinnati Traffic Management	traffic flow	Existing
Roadway Subsystem	City of Cincinnati Traffic Management	traffic images	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	fault reports	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	freeway control status	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	incident data	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	roadway information system status	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	traffic flow	Planned
Roadway Subsystem	Cumberland Gap Traffic Management Center	traffic images	Planned
Roadway Subsystem	Driver	driver information	Planned
Roadway Subsystem	Lexington Traffic Management	environmental conditions	Existing
Roadway Subsystem	Lexington Traffic Management	fault reports	Existing
Roadway Subsystem	Lexington Traffic Management	incident data	Existing
Roadway Subsystem	Lexington Traffic Management	request for right-of-way	Planned
Roadway Subsystem	Lexington Traffic Management	reversible lane status	Planned
Roadway Subsystem	Lexington Traffic Management	roadway information system status	Existing
Roadway Subsystem	Lexington Traffic Management	signal control status	Planned
Roadway Subsystem	Lexington Traffic Management	traffic flow	Existing
Roadway Subsystem	Lexington Traffic Management	traffic images	Existing
Roadway Subsystem	Other Traffic Management	fault reports	Existing
Roadway Subsystem	Other Traffic Management	request for right-of-way	Planned
Roadway Subsystem	Other Traffic Management	roadway information system status	Planned
Roadway Subsystem	Other Traffic Management	signal control status	Existing
Roadway Subsystem	Other Traffic Management	traffic flow	Existing
Roadway Subsystem	Other Traffic Management	traffic images	Planned
Roadway Subsystem	Pedestrians	crossing permission	Existing
Roadway Subsystem	STOC Traffic Management	environmental conditions	Existing
Roadway Subsystem	STOC Traffic Management	roadway information system status	Planned
Roadway Subsystem	TRIMARC Traffic Management	incident data	Planned
Roadway Subsystem	TRIMARC Traffic Management	request for right-of-way	Planned
Roadway Subsystem	TRIMARC Traffic Management	roadway information system status	Existing
Roadway Subsystem	TRIMARC Traffic Management	signal control status	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
Roadway Subsystem	TRIMARC Traffic Management	traffic flow	Existing
Roadway Subsystem	TRIMARC Traffic Management	traffic images	Existing
RPC	Commercial Vehicle Administration	CVAS information exchange	Existing
Rural Transit Providers	STOC Information Service Provider	transit and fare schedules	Planned
RWIS Stations	CGT Historical Traffic Data Repository	roadside archive data	Planned
RWIS Stations	Cumberland Gap Traffic Management Center	environmental conditions	Planned
RWIS Stations	Cumberland Gap Traffic Management Center	fault reports	Planned
RWIS Stations	Cumberland Gap Traffic Management Center	freeway control status	Planned
RWIS Stations	STOC Traffic Management	environmental conditions	Existing
RWIS Stations	STOC Traffic Management	traffic flow	Existing
RWIS Stations	STOC Traffic Management	traffic images	Existing
SAFER	Commercial Vehicle Administration	CVAS information exchange	Existing
Somerset Fire Station	Roadway Subsystem	signal preemption request	Existing
TOC Information Service Provider	Cumberland Gap Information Service Provider	ISP coordination	Planned
TOC Information Service Provider	Media	traveler information for media	Existing
TOC Information Service Provider	Personal Information Access	traveler information	Existing
TOC Information Service Provider	Remote Traveler Support Kiosks	traveler information	Planned
TOC Information Service Provider	Rural Transit Providers	transit information request	Planned
TOC Information Service Provider	STOC Traffic Management	logged special vehicle route	Existing
TOC Information Service Provider	STOC Traffic Management	request for traffic information	Existing
TOC Information Service Provider	STOC Traffic Management	Request for Weather-Related Traffic Information	Existing
TOC Operations Personnel	STOC Traffic Management	traffic operator inputs	Existing
TOC Traffic Management	ARTIMIS Traffic Management	environmental conditions-2	Existing
TOC Traffic Management	ARTIMIS Traffic Management	traffic control coordination	Planned
TOC Traffic Management	ARTIMIS Traffic Management	traffic information coordination	Planned
TOC Traffic Management	Commonwealth EOC	current network conditions	Planned
TOC Traffic Management	Commonwealth EOC	incident information	Existing
TOC Traffic Management	Indianapolis Traffic Management	environmental conditions-2	Existing
TOC Traffic Management	Indianapolis Traffic Management	traffic control coordination	Planned
TOC Traffic Management	Indianapolis Traffic Management	traffic information coordination	Existing
TOC Traffic Management	KVE Emergency Management	current network conditions	Existing
TOC Traffic Management	KVE Emergency Management	incident information	Existing
TOC Traffic Management	KVE Emergency Management	resource deployment status	Existing
TOC Traffic Management	KYTC District Maintenance	closure coordination	Existing
TOC Traffic Management	KYTC District Maintenance	maintenance resource request	Existing
TOC Traffic Management	Lexington Traffic Management	environmental conditions-2	Existing
TOC Traffic Management	Lexington Traffic Management	traffic control coordination	Planned
TOC Traffic Management	Lexington Traffic Management	traffic information coordination	Planned
TOC Traffic Management	Media	traffic information for media	Planned
TOC Traffic Management	Nashville Traffic Management	environmental conditions-2	Existing
TOC Traffic Management	Nashville Traffic Management	traffic control coordination	Planned
TOC Traffic Management	Nashville Traffic Management	traffic information coordination	Planned
TOC Traffic Management	Roadway Subsystem	roadway information system data	Existing
	RWIS Stations		
TOC Traffic Management TOC Traffic Management	STOC Information Service Provider	traffic information	Existing
TOC Traffic Management TOC Traffic Management	STOC Information Service Provider STOC Information Service Provider	Weather-Related Traffic Information	Existing
TOC Traffic Management	STOC Operations Personnel		
		traffic operator data environmental conditions-2	Existing
TOC Traffic Management	TRIMARC Traffic Management		Existing
TOC Traffic Management	TRIMARC Traffic Management	traffic control coordination	Planned
TOC Traffic Management	TRIMARC Traffic Management	traffic information coordination	Planned
ΓΑΝΚ Transit Dispatch Center	ARTIMIS Archived Data Management	transit archive data	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
TANK Transit Dispatch Center	ARTIMIS Information Service Provider	demand responsive transit plan	Planned
TANK Transit Dispatch Center	ARTIMIS Information Service Provider	transit and fare schedules	Planned
TANK Transit Dispatch Center	ARTIMIS Information Service Provider	transit incident information	Planned
TANK Transit Dispatch Center	ARTIMIS Information Service Provider	transit request confirmation	Planned
TANK Transit Dispatch Center	ARTIMIS Traffic Management	transit system data	Planned
TARC Transit Management	Remote Traveler Support Kiosks	transit traveler information	Planned
TARC Transit Management	TRIMARC Information Service Provider	transit and fare schedules	Planned
Tennessee Historical Incident Data Repository	CGT Historical Incident Data Repository	archive coordination	Planned
Tennessee Historical Traffic Data Repository	CGT Historical Traffic Data Repository	archive coordination	Planned
Traffic Information Network	Lexington Emergency Management Center	incident information request	Existing
Traffic Information Network	Lexington TMC Operations Personnel	ISP operating parameters	Existing
Traffic Information Network	Lexington Traffic Management	ISP coordination	Existing
Traffic Information Network	Lexington Traffic Management	request for traffic information	Existing
Traffic Information Network	Lexington Traffic Management	road network use	Existing
Traffic Information Network	Lexington Transit Management Center	demand responsive transit request	Existing
Traffic Information Network	Lexington Transit Management Center	transit information request	Planned
Traffic Information Network	Media	traveler information for media	Existing
Traffic Information Network	Personal Information Access	broadcast information	Existing
Traffic Information Network	Personal Information Access	traveler information	Existing
Traffic Information Network	Remote Traveler Support Kiosks	broadcast information	Existing
Traffic Information Network	Remote Traveler Support Kiosks	traveler information	Existing
Traffic Information Network	Traffic Information Network Personnel	ISP operating parameters	Existing
Traffic Information Network	Vehicle	broadcast information	Existing
Traffic Information Network	Vehicle	traveler information	Existing
Traffic Information Network Personnel	Lexington Traffic Management	ISP operating parameter updates	Existing
Traffic Information Network Personnel	Traffic Information Network	ISP operating parameter updates	Existing
Transit Driver	Lexington Transit Management Center	transit driver availability	Planned
Transit User	Remote Traveler Support Kiosks	transit user inputs	Planned
Transit Vehicle	Lexington Transit Management Center	fare and payment status	Planned
Transit Vehicle	Lexington Transit Management Center	request for bad tag list	Planned
Transit Vehicle	Lexington Transit Management Center	transit traveler request	Planned
Transit Vehicle	Lexington Transit Management Center	transit vehicle location data	Planned
Transit Vehicle	Lexington Transit Management Center	transit vehicle passenger and use data	Planned
Transit Vehicle	Lexington Transit Management Center	transit vehicle schedule performance	Planned
Transit Vehicle	Payment Instrument	request for payment	Planned
Transit Vehicle	TARC Transit Management	transit vehicle location data	Planned
Transit Vehicle	TARC Transit Management	transit vehicle schedule performance	Planned
Transit Vehicle	Transit Driver	transit driver display	Existing
Transit Vehicle	Transit User	transit user fare status	Planned
Transit Vehicle	Transit User	transit user outputs	Planned
Traveler	Personal Information Access	traveler inputs	Planned
Traveler	Remote Traveler Support Kiosks	traveler inputs	Planned
TRIMARC Archived Data Management	KIPDA Data System	archived data products	Existing
TRIMARC Archived Data Management	KYTC ftp server	archived data products	Existing
FRIMARC Archived Data Management	TRIMARC Data Administrator	archive management data	Existing
TRIMARC Archived Data Management	TRIMARC Traffic Management	archive requests	Existing
TRIMARC Archived Data Management	TRIMARC Traffic Management	archive status	Existing
TRIMARC Area Emergency Response Agencies	Emergency Vehicle	emergency dispatch requests	Existing
TRIMARC Area Emergency Response Agencies	Emergency Vehicle	incident command information	Existing
TRIMARC Area Emergency Response Agencies	Other EM	incident command information	Existing
TRIMARC Area Emergency Response Agencies	Other EM	incident report incident response coordination	Existing

SourceElement	DestinationElement	FlowName	FlowStatus
TRIMARC Area Emergency Response Agencies	TRIMARC Information Service Provider	incident information	Existing
TRIMARC Area Emergency Response Agencies	TRIMARC Information Service Provider	logged special vehicle route-2	Existing
TRIMARC Area Emergency Response Agencies	TRIMARC Traffic Management	incident information	Existing
TRIMARC Area Emergency Response Agencies	TRIMARC Traffic Management	remote surveillance control	Existing
TRIMARC Area Emergency Response Agencies	TRIMARC Traffic Management	resource request	Existing
TRIMARC Data Administrator	TRIMARC Archived Data Management	archive management requests	Existing
TRIMARC Freeway Service Patrol Vans	TRIMARC Traffic Management	incident status-2	Existing
TRIMARC Information Service Provider	Media	traveler information for media	Existing
TRIMARC Information Service Provider	Personal Information Access	traveler information	Existing
TRIMARC Information Service Provider	TARC Transit Management	transit information request	Planned
TRIMARC Information Service Provider	TRIMARC Traffic Management	logged special vehicle route	Existing
TRIMARC Information Service Provider	TRIMARC Traffic Management	request for traffic information	Existing
TRIMARC Operations Personnel	TRIMARC Traffic Management	traffic operator inputs	Existing
TRIMARC Traffic Management	INDOT District Maintenance	closure coordination	Existing
TRIMARC Traffic Management	INDOT District Maintenance	maintenance resource request	Existing
TRIMARC Traffic Management	Jefferson County EMA	current network conditions	Existing
TRIMARC Traffic Management	KYTC District Maintenance	closure coordination	Existing
TRIMARC Traffic Management	KYTC District Maintenance	maintenance resource request	Existing
TRIMARC Traffic Management	Roadway Subsystem	roadway information system data	Existing
TRIMARC Traffic Management	Roadway Subsystem	sensor and surveillance control	Existing
TRIMARC Traffic Management	Roadway Subsystem	signal control data	Planned
TRIMARC Traffic Management	STOC Traffic Management	traffic control coordination	Planned
TRIMARC Traffic Management	STOC Traffic Management	traffic information coordination	Planned
TRIMARC Traffic Management	TARC Transit Management	traffic information for transit	Planned
TRIMARC Traffic Management	TRIMARC Archived Data Management	traffic archive data	Existing
TRIMARC Traffic Management	TRIMARC Area Emergency Response Agencies	current network conditions	Existing
TRIMARC Traffic Management	TRIMARC Area Emergency Response Agencies	incident information	Existing
TRIMARC Traffic Management	TRIMARC Area Emergency Response Agencies	resource deployment status	Existing
TRIMARC Traffic Management	TRIMARC Freeway Service Patrol Vans	emergency dispatch request-2	Existing
TRIMARC Traffic Management	TRIMARC Information Service Provider	traffic information	Existing
TRIMARC Traffic Management	TRIMARC Operations Personnel	traffic operator data	Existing
Tunnel Electronic Tag Reader	Commercial Vehicle Subsystem	screening request	Planned
Tunnel Emergency Management Center	CGT Historical Incident Data Repository	emergency archive data	Existing
Tunnel Emergency Management Center	CGT Regional GIS Agency	map update request	Planned
Tunnel Emergency Management Center	Commercial Fleet Management	HAZMAT information request	Planned
Tunnel Emergency Management Center	Cumberland Gap Traffic Management Center	emergency traffic control request	Planned
Tunnel Emergency Management Center	Cumberland Gap Traffic Management Center	incident information	Planned
Tunnel Emergency Management Center	Cumberland Gap Traffic Management Center	incident response status	Planned
Tunnel Emergency Management Center	Cumberland Gap Traffic Management Center	remote surveillance control	Planned
Tunnel Emergency Management Center	Cumberland Gap Traffic Management Center	resource request	Planned
Tunnel Emergency Management Center	Emergency Vehicle	emergency dispatch requests	Planned
Tunnel Emergency Management Center	Emergency Vehicle	incident command information	Planned
Tunnel Emergency Management Center Tunnel Emergency Management Center	Tunnel Emergency System Operator	emergency operations status	Planned
Tunnel Emergency System Operator	Tunnel Emergency Management Center	emergency operations request	Existing
Tunnel Roadway Subsystem	Basic Vehicle	broadcast advisories	Existing
Tunnel Roadway Subsystem	CGT Historical Traffic Data Repository	roadside archive data	Planned
Tunnel Roadway Subsystem Tunnel Roadway Subsystem	Cumberland Gap Traffic Management Center	fault reports	Planned
Tunnel Roadway Subsystem Tunnel Roadway Subsystem			Planned
	Cumberland Cap Traffic Management Center	freeway control status	
Tunnel Roadway Subsystem Tunnel Roadway Subsystem	Cumberland Gap Traffic Management Center Cumberland Gap Traffic Management Center	incident data	Planned
TUDDEL KOZOWAY SUDSYSTEM	icumpenang Gap Tramic Management Center	roadway information system status	Planned

SourceElement	DestinationElement	FlowName	FlowStatus
Tunnel Roadway Subsystem	Cumberland Gap Traffic Management Center	traffic images	Planned
Tunnel Roadway Subsystem	Driver	driver information	Existing
Vehicle	Driver	driver updates	Planned
Vehicle	Lexington Traffic Management	traveler request	Existing
Vehicle	Traffic Information Network	traveler request	Existing
Vehicle	Transit Vehicle	vehicle location	Planned
Vehicle	TRIMARC Traffic Management	vehicle probe data-2	Planned
Weather Service	Cumberland Gap Traffic Management Center	weather information	Planned
Weather Service	KVE Emergency Management	weather information	Existing
Weather Service	Lexington Archived Data Management Center	weather information	Existing
Weather Service	Lexington Emergency Management Center	weather information	Existing
Weather Service	Lexington Traffic Management	weather information	Existing
Weather Service	Lexington Transit Management Center	weather information	Existing
Weather Service	STOC Information Service Provider	weather information	Existing
Weather Service	STOC Traffic Management	weather information	Existing
Weather Service	Traffic Information Network	weather information	Existing
Weather Service	TRIMARC Area Emergency Response Agencies	weather information	Existing
Weather Service	TRIMARC Information Service Provider	weather information	Existing
Weather Service	TRIMARC Traffic Management	weather information	Existing
Yellow Pages Service Providers	Cumberland Gap Information Service Provider	provider profile data	Planned
Yellow Pages Service Providers	Cumberland Gap Information Service Provider	travel service info	Planned
Yellow Pages Service Providers	Private commercial information providers	travel service info	Planned

APPENDIX B

MARKET PACKAGE DIAGRAMS

Market Package Diagrams: ARTIMIS

For the Kentucky Statewide ITS Architecture: 4/19/02

Listing of Specific Entities

Transit Management:

Metro Transit Dispatch Center

TANK Transit Dispatch Center

Parking Management:

City of Cincinnati Parking Management

Traffic Management and Other TM:

ARTIMIS Traffic Management

City of Cincinnati Traffic Management

Other Traffic Management

Emergency Management and Other EM:

ARTIMIS Emergency Management

Boone County 911/CAD

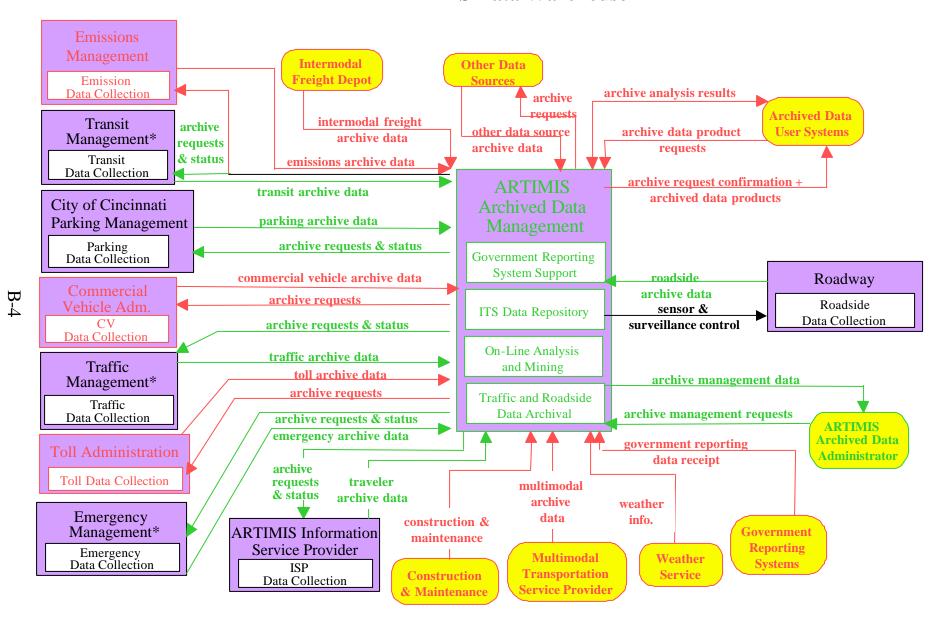
City of Cincinnati 911/CAD

Hamilton County 911/CAD

ARTIMIS Area 911/CAD Centers

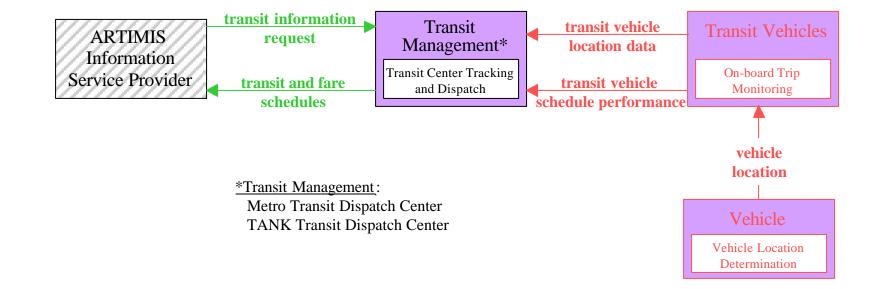
ARTIMIS Area Emergency Response Agencies

AD2 - ITS Data Warehouse

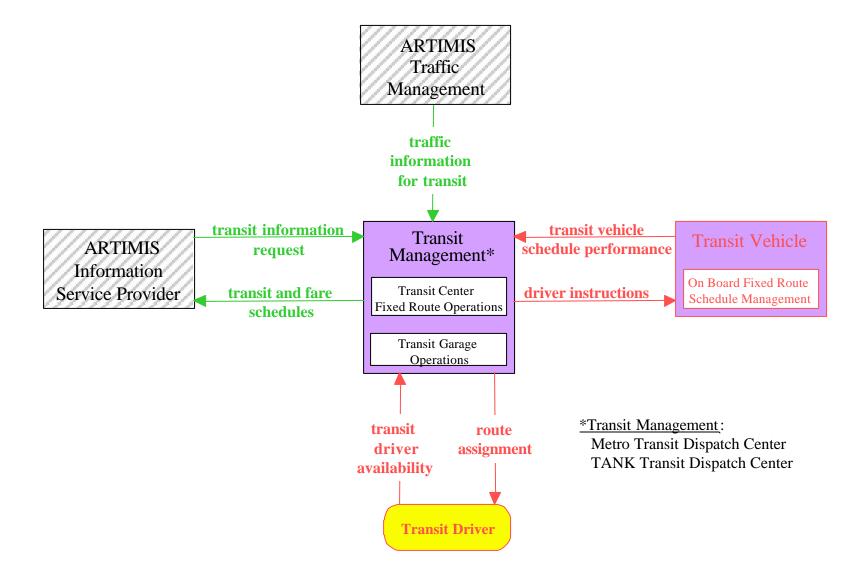


* See slide #2 for listing of specific entities

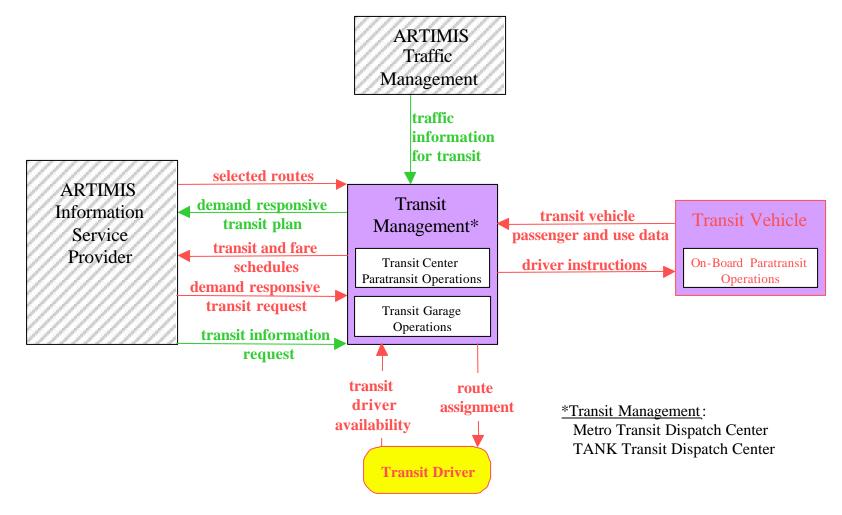
APTS1 - Transit Vehicle Tracking



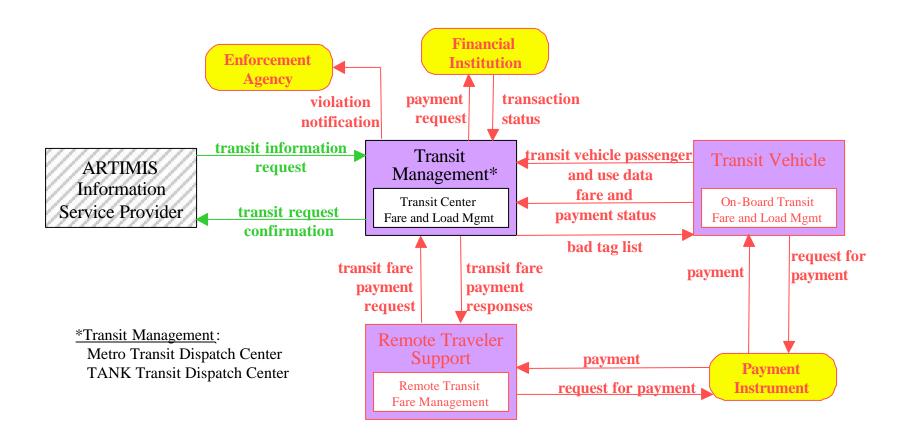
APTS2 - Transit Fixed-Route Operations



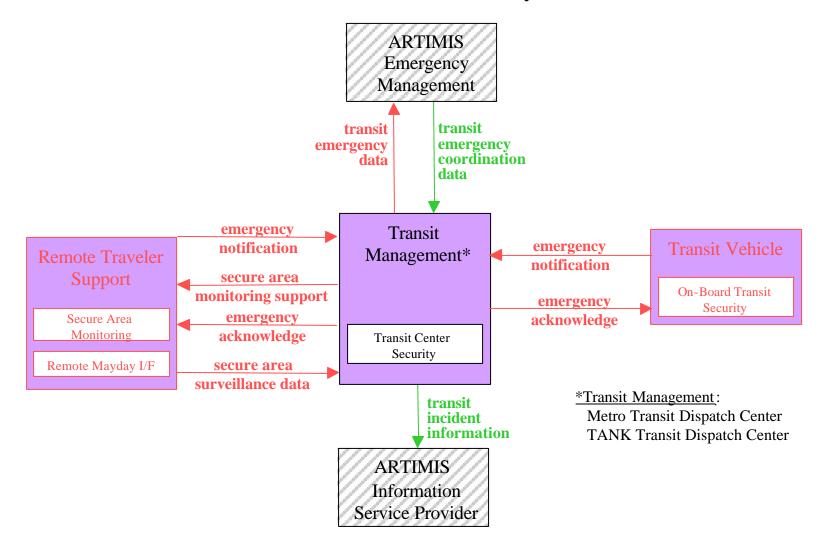
APTS3 - Demand Response Transit Operations



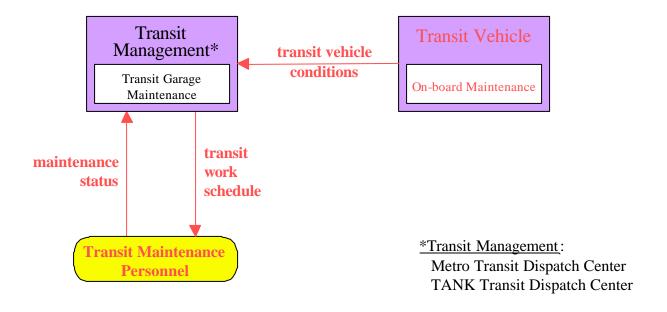
APTS4 Transit Passenger and Fare Management



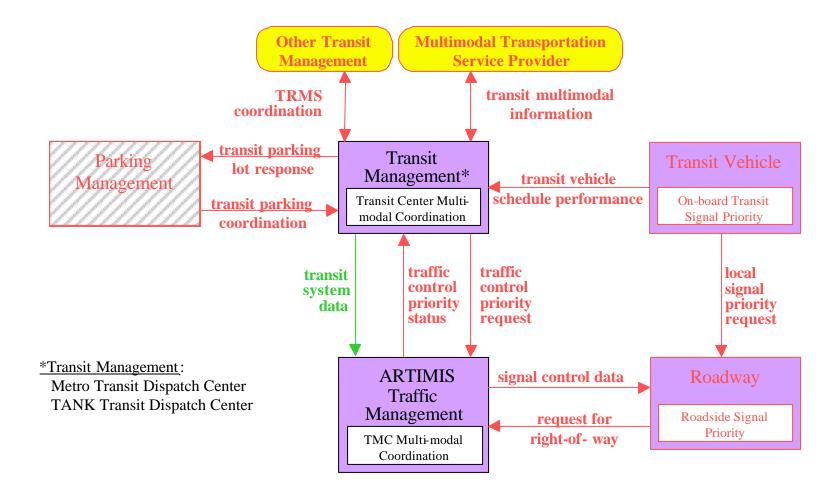
APTS5 - Transit Security



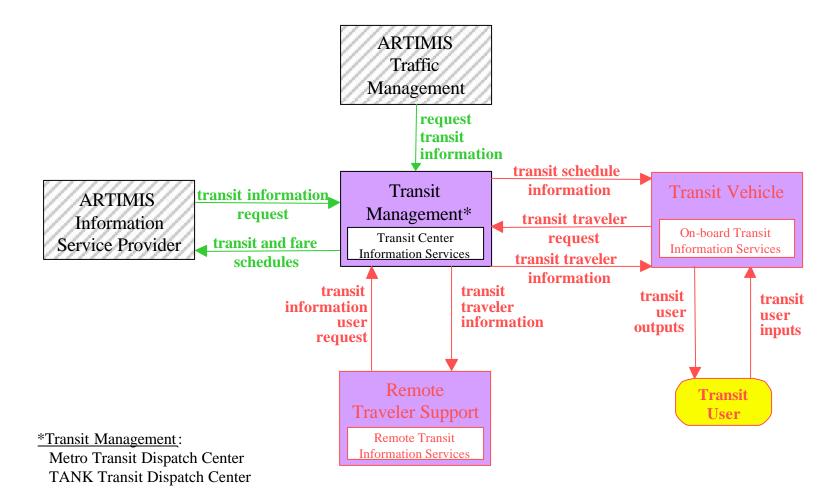
APTS6 - Transit Maintenance



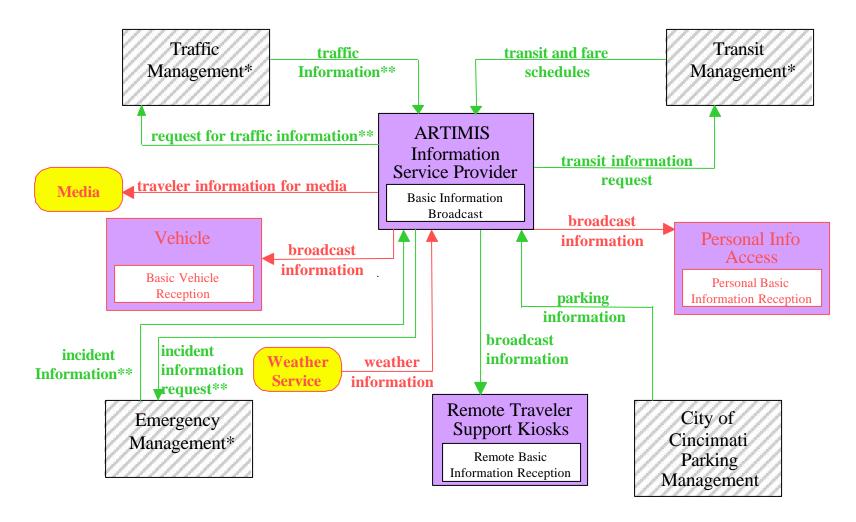
APTS7 - Multi-Modal Coordination



APTS8 - Transit Traveler Information



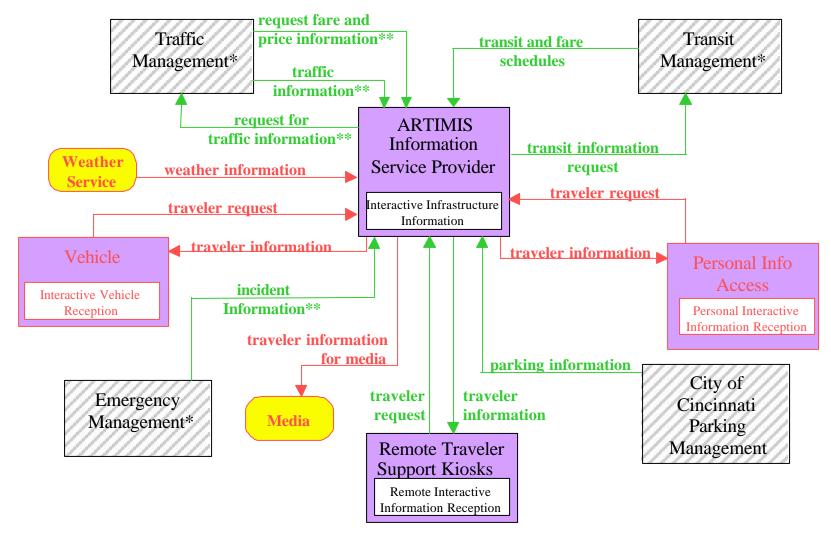
ATIS1 - Broadcast Traveler Information



* See slide #2 for listing of specific entities

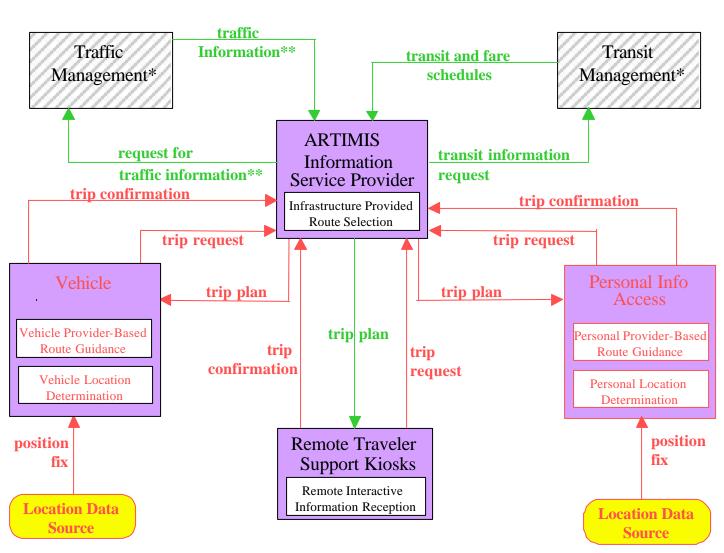
**existing flow within ARTIMIS

ATIS2 - Interactive Traveler Information



^{*} See slide #2 for listing of specific entities

**existing flow within ARTIMIS

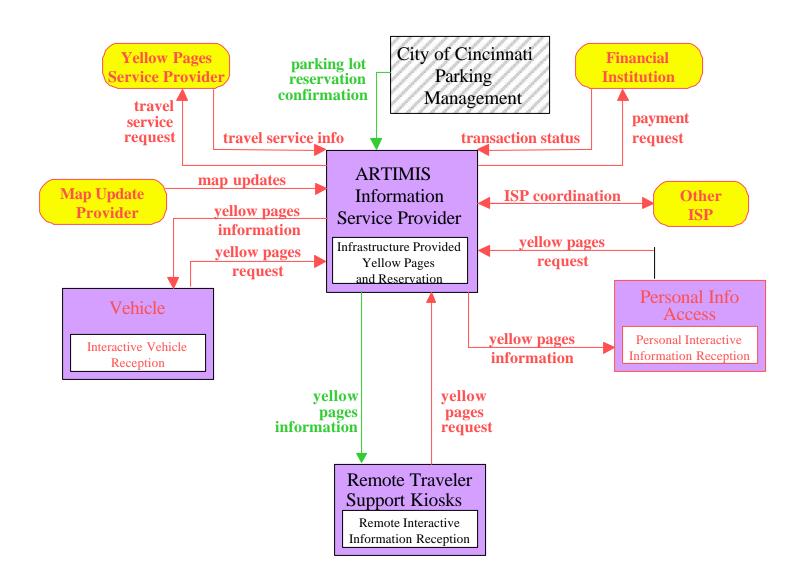


ATIS5 - ISP Based Route Guidance

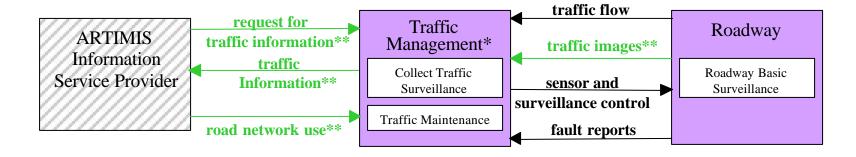
**existing flow within ARTIMIS

^{*} See slide #2 for listing of specific entities

ATIS7 - Yellow Pages and Reservation



ATMS01 - Network Surveillance

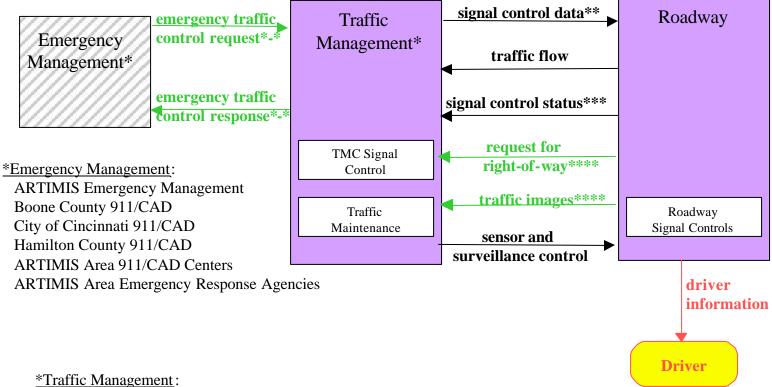


**existing flow for ARTIMIS Traffic Management

*Traffic Management:

ARTIMIS Traffic Management City of Cincinnati Traffic Management Other Traffic Management

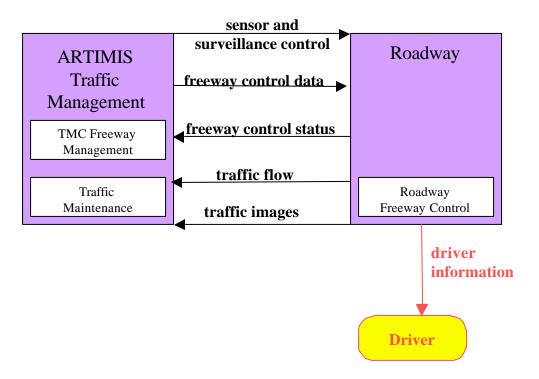
ATMS03 - Surface Street Control



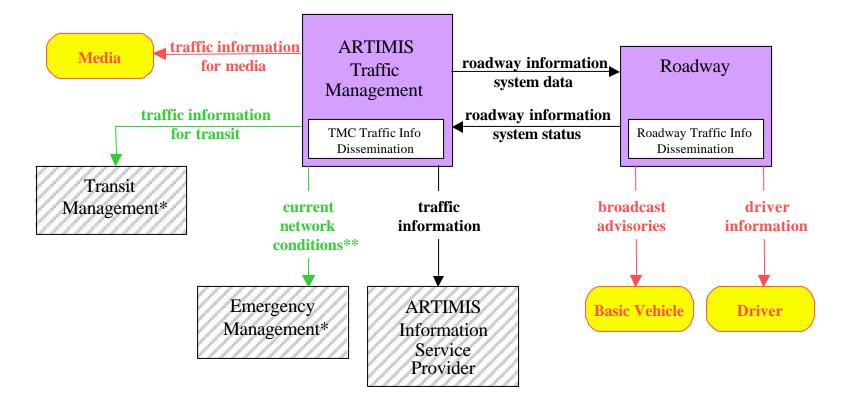
ARTIMIS Traffic Management City of Cincinnati Traffic Management Other Traffic Management

- **flow not planned for ARTIMIS Traffic Management
- ***flow is planned for ARTIMIS Traffic Management
- ****flow is existing for ARTIMIS Traffic Management
- *-*flow is existing for ARTIMIS-ARTIMIS and planned for **ARTIMIS-Other**, not planned for Other-Other.

ATMS04 - Freeway Control



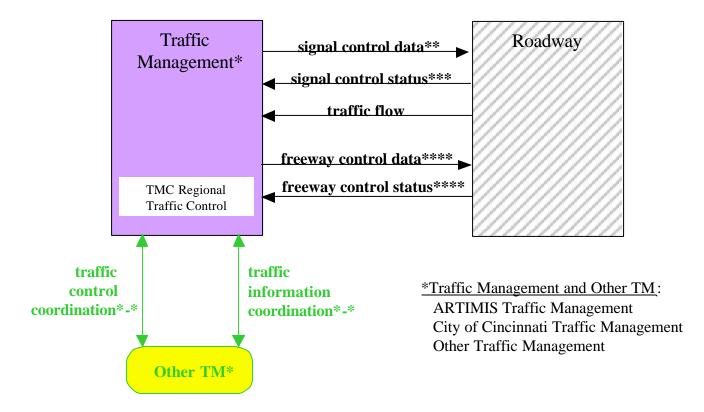
ATMS06 Traffic Information Dissemination



* See slide #2 for listing of specific entities

**existing flow within ARTIMIS

ATMS07 - Regional Traffic Control



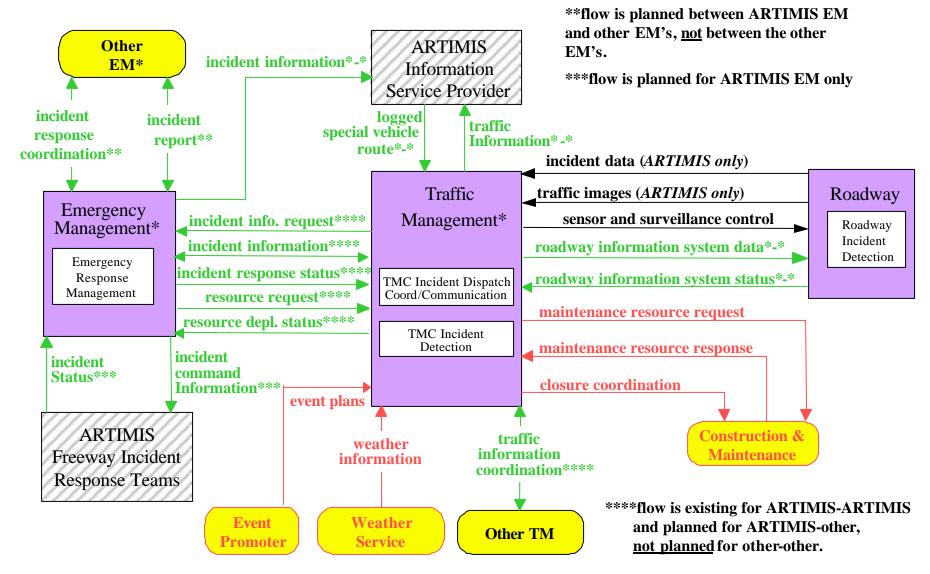
*-*these flows are planned for ARTIMIS<-->other, not for other<-->other

***flow not planned for ARTIMIS Traffic Management

***flow is planned for ARTIMIS Traffic Management

****flow exists only for ARTIMIS Traffic Management

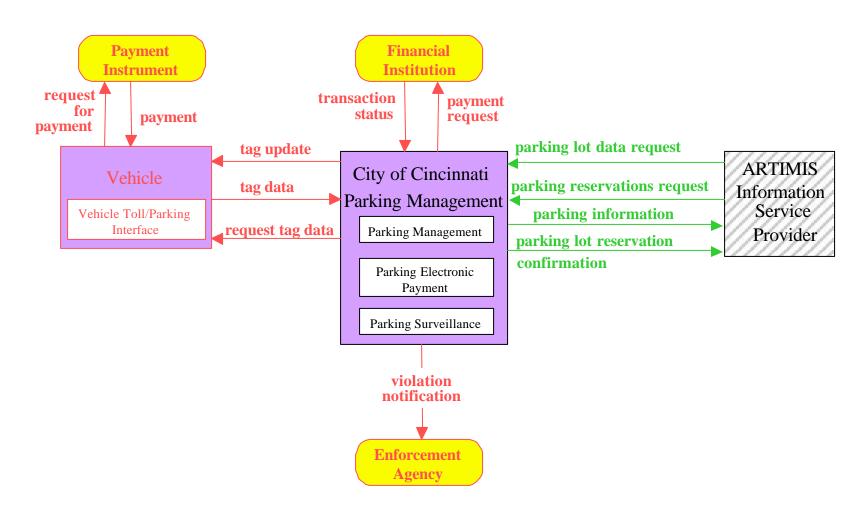
ATMS08 - Incident Management System



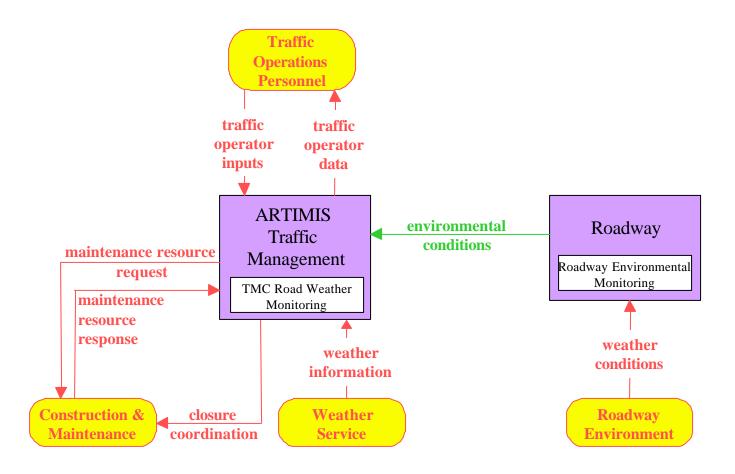
^{*-*}flow is existing within ARTIMIS

* See slide #2 for listing of specific entities

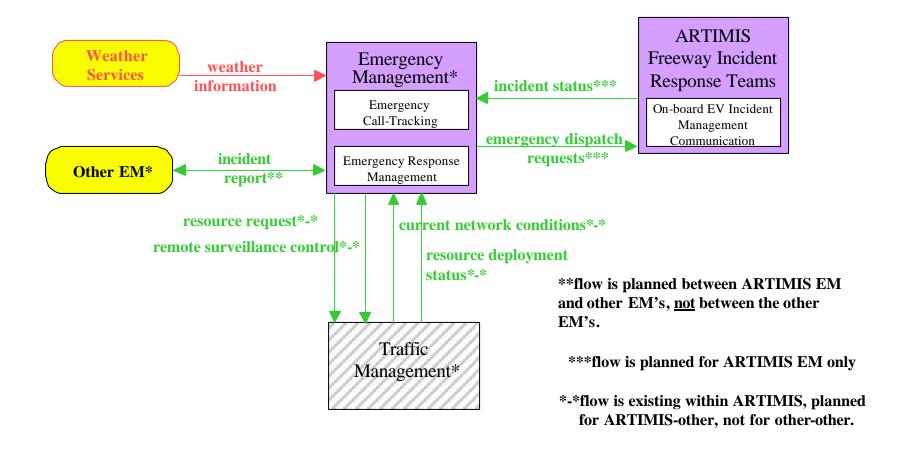
ATMS16 - Parking Facility Management



ATMS18 - Road Weather Information System

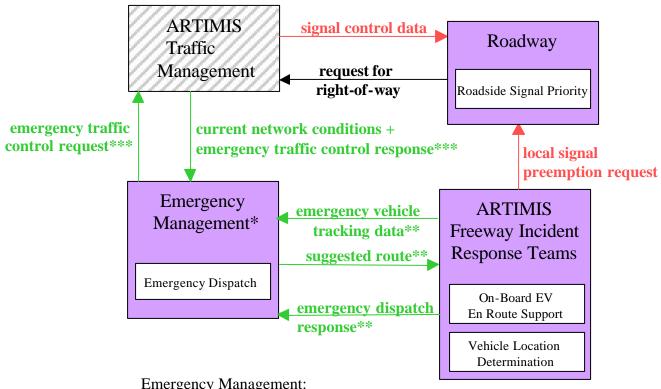


EM1 - Emergency Response



^{*} See slide #2 for listing of specific entities

EM2 - Emergency Routing



Emergency Management:

ARTIMIS Emergency Management

Boone County 911/CAD

City of Cincinnati 911/CAD

Hamilton County 911/CAD

ARTIMIS Area 911/CAD Centers

ARTIMIS Area Emergency Response Agencies

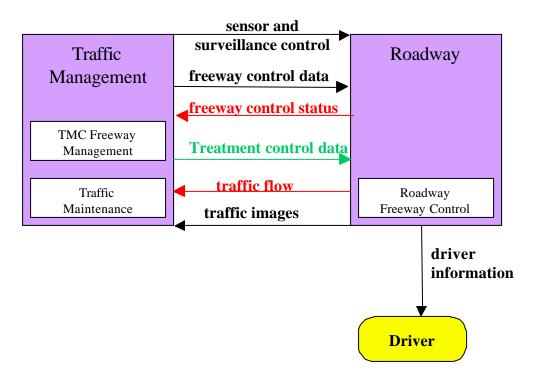
**flow is planned for ARTIMIS EM only

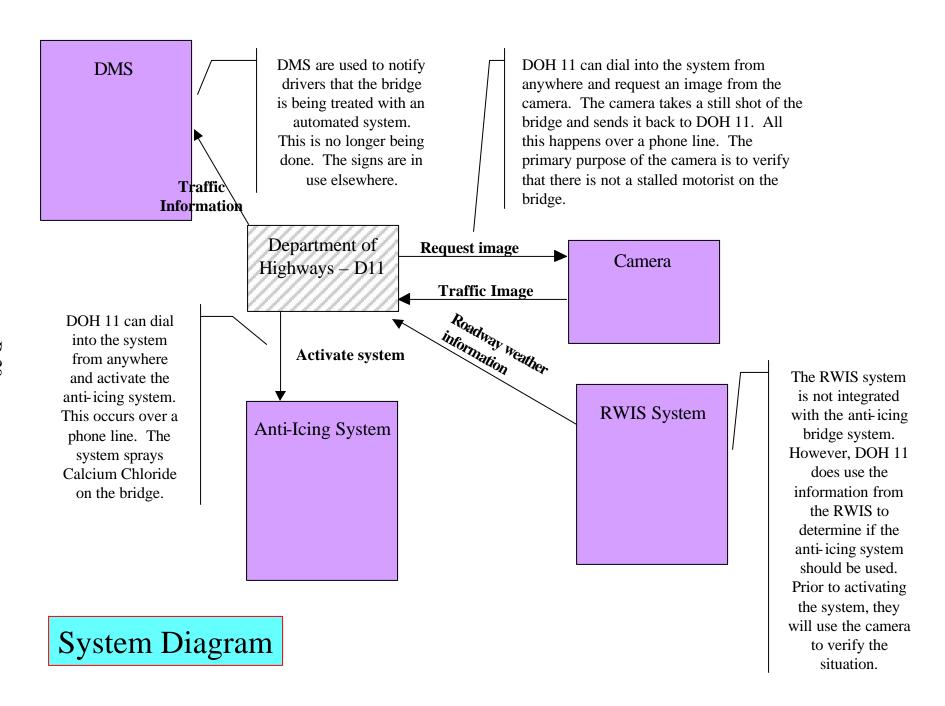
**flow is existing for ARTIMIS EM

Market Package Diagrams: Bridge Anti-Icing

For the Kentucky Statewide ITS Architecture: 8/16/01

ATMS04 - Freeway Control

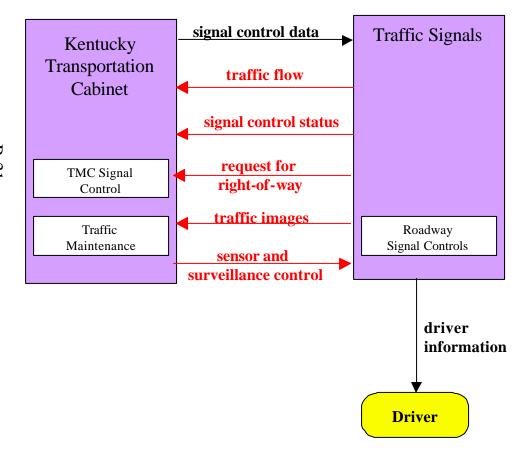




Market Package Diagrams: Coordinated Signal Systems

For the Kentucky Statewide ITS Architecture: 8/16/01

ATMS03 - Surface Street Control



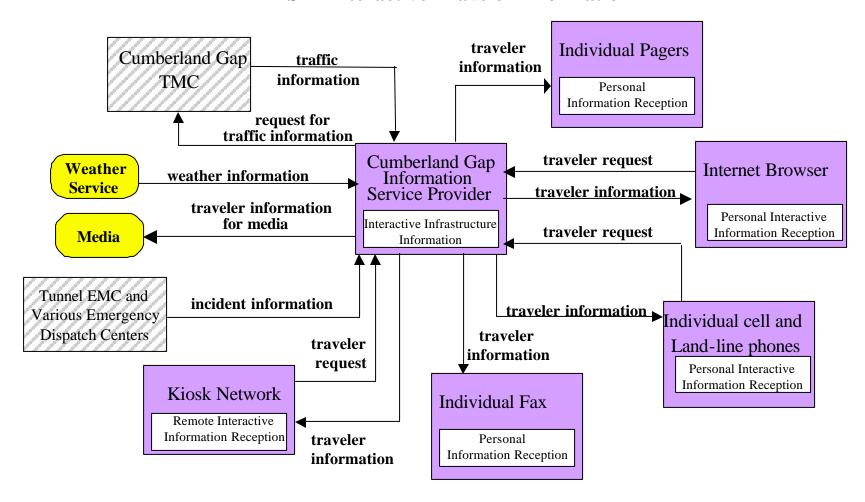
Cities or Counties Included:	
Paducah	Boone County
Murray	Paris
Bowling Green	Danville
Radcliff	Winchester
Elizabethtown	Nicholasville
Jefferson County	Berea
Shelbyville	Richmond
Middletown	Georgetown
LeGrange	Somerset
Frankfort	Morehead
Alexandria	Flatwoods
Cynthiana	Grayson
Kenton County	Ashland
Newport	West Liberty
Dixie	Irvine
Covington	Pikeville
Bellevue	Prestonsburg
Dayton	Paintsville
Ludlow	Whitesburg
Campbell County	Louisa
Kenton County	Henderson
Florence	Owensboro

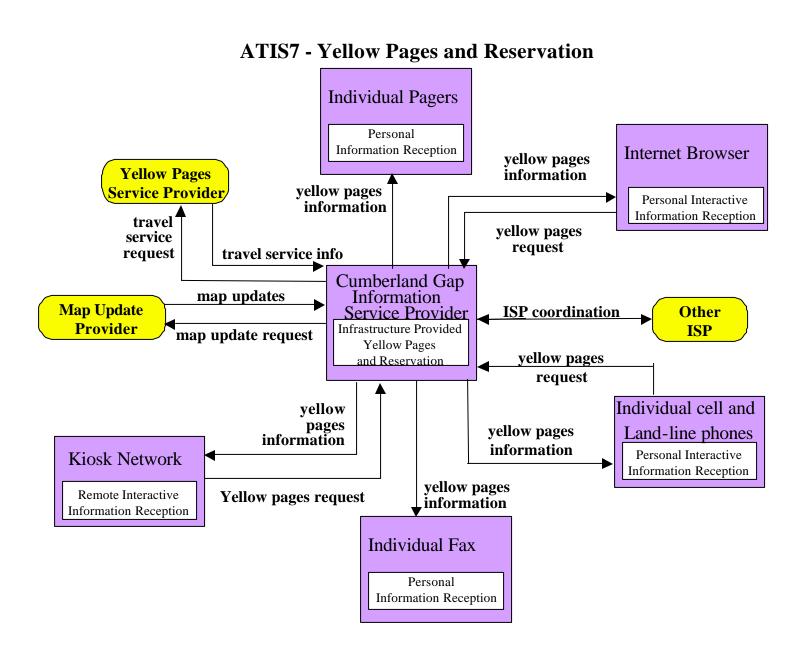
B-31

Market Package Diagrams: Cumberland Gap Tunnel

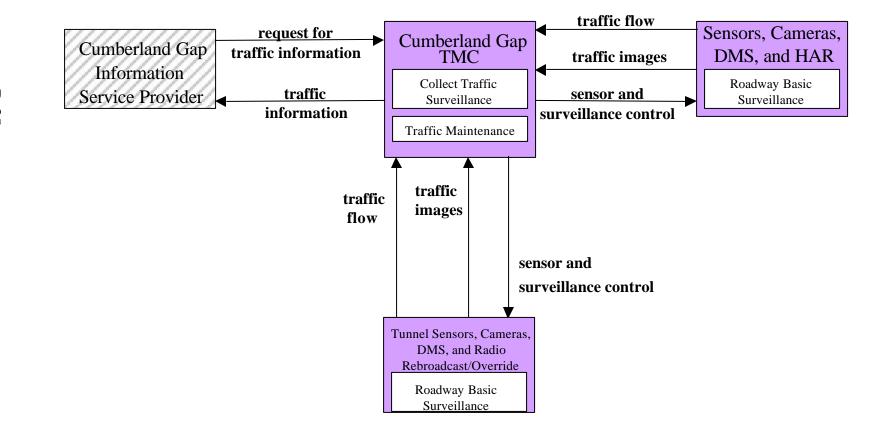
For the Kentucky Statewide ITS Architecture: 4/18/02

ATIS2 - Interactive Traveler Information

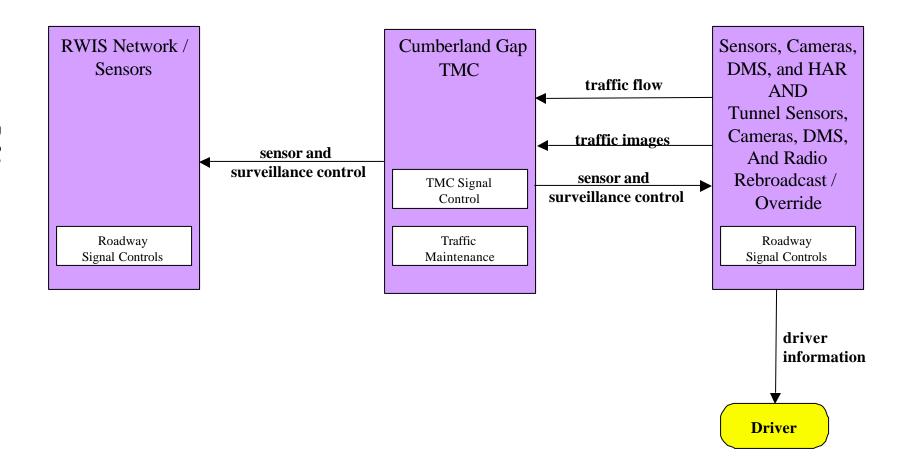




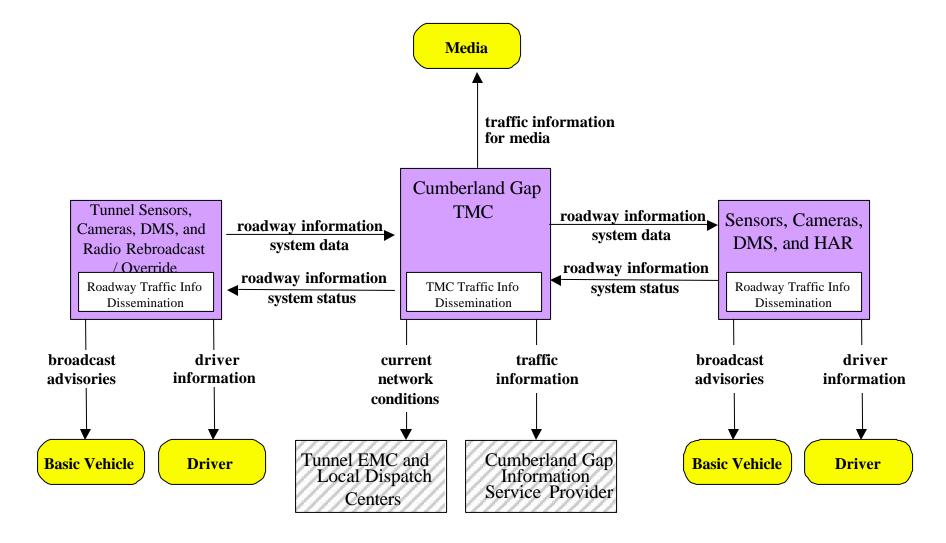
ATMS01 - Network Surveillance



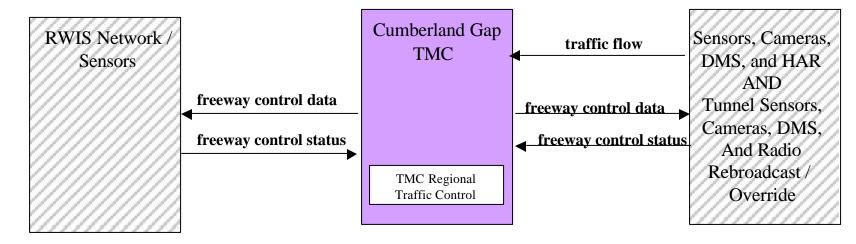
ATMS03 - Surface Street Control

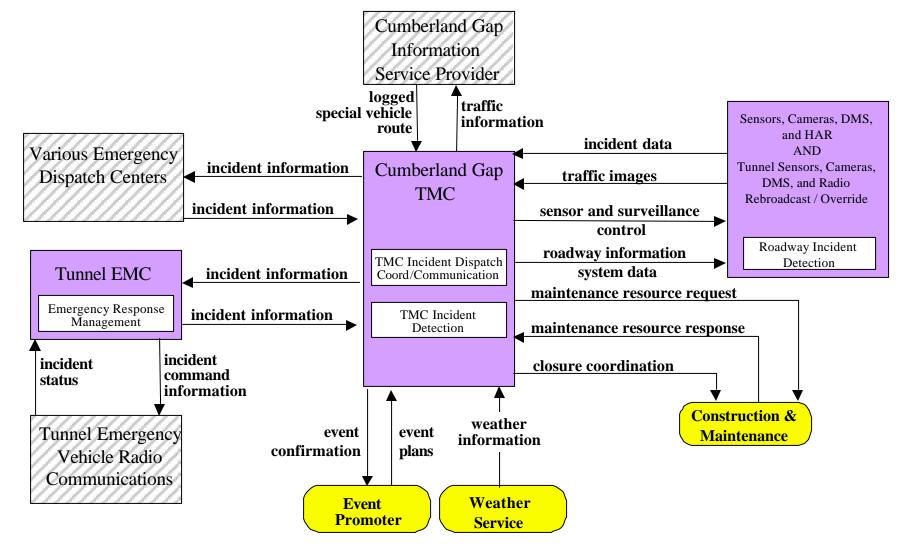


ATMS06 Traffic Information Dissemination



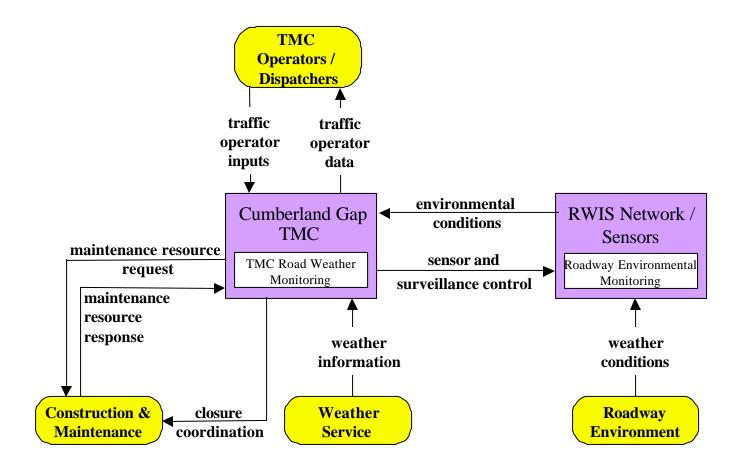
ATMS07 - Regional Traffic Control



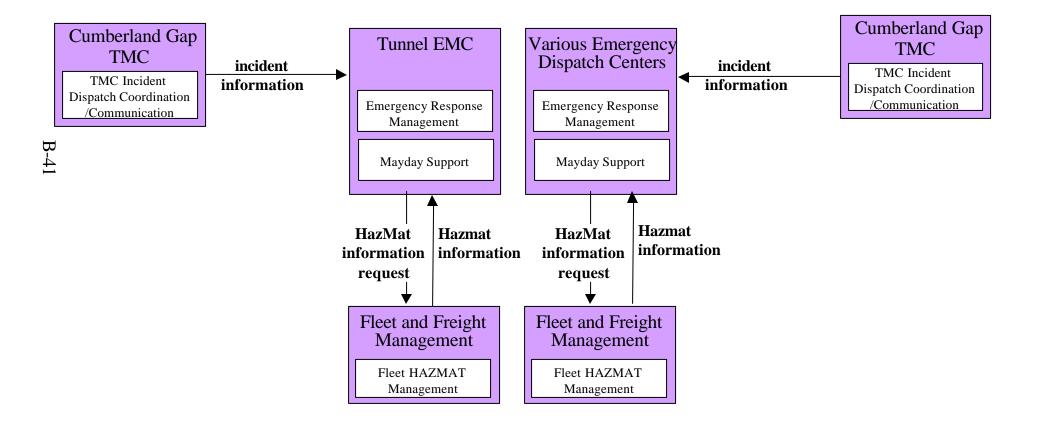


B-39

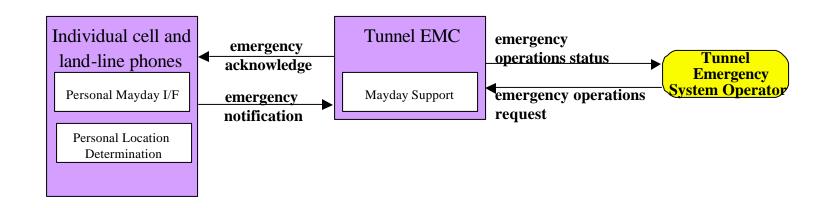
ATMS18 - Road Weather Information System



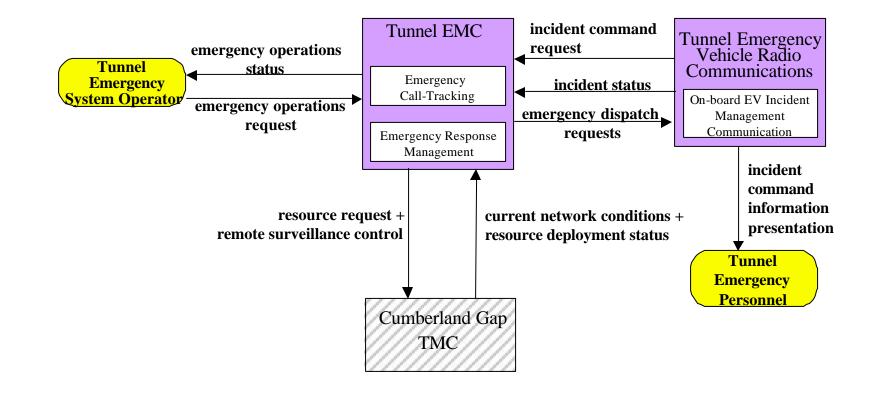
CVO10 - HAZMAT Management

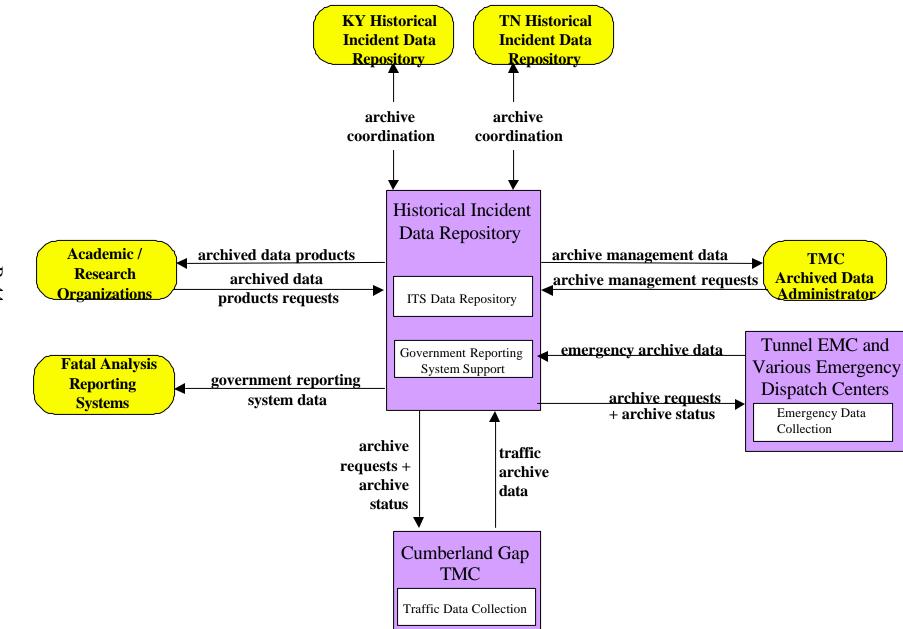


EM3 - Mayday Support



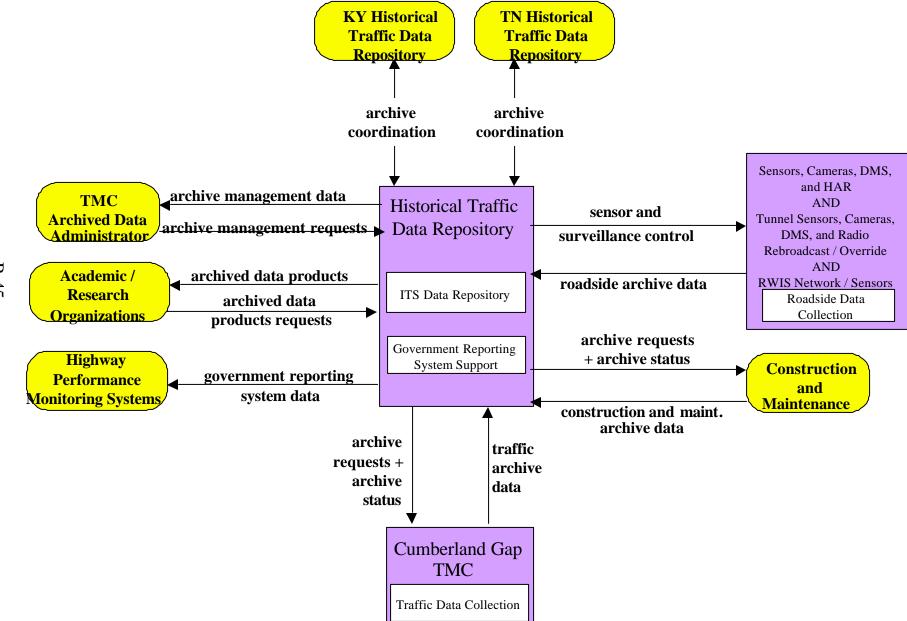
EM1 - Emergency Response





B-44

AD1 - ITS Data Mart

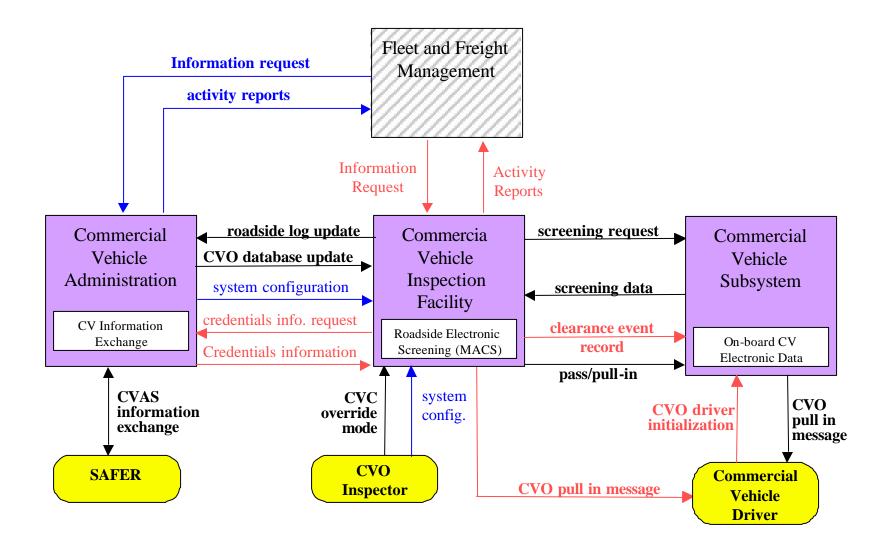


B-45

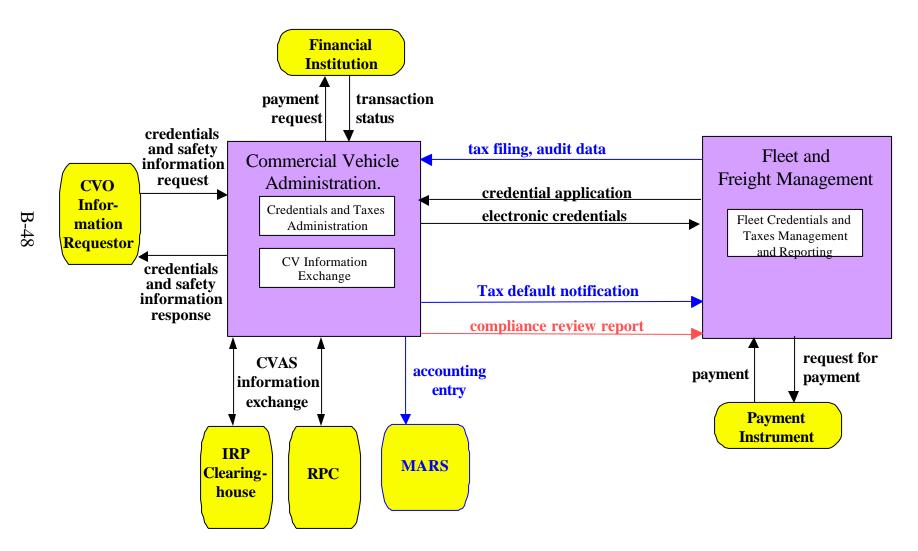
Market Package Diagrams: CVO

Kentucky Statewide ITS Architecture: 2/22/01

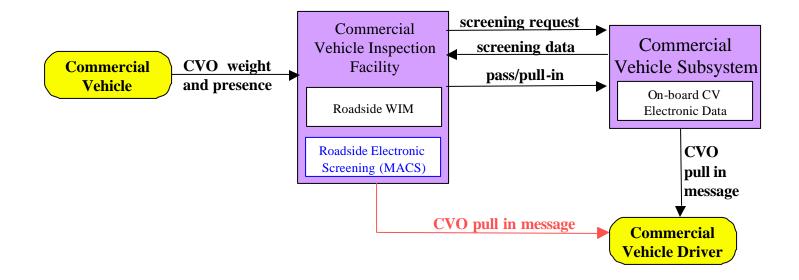
CVO03 - Electronic Clearance



CVO04 - CV Administrative Processes

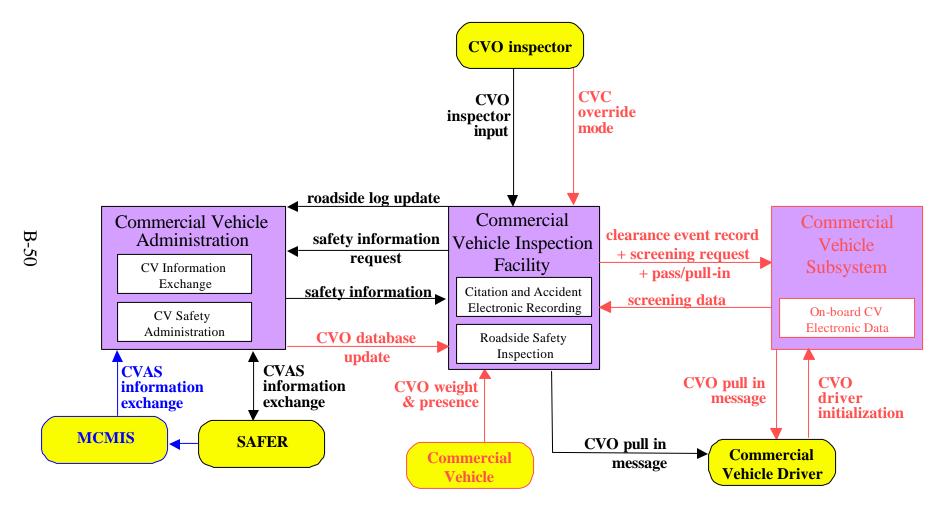


CVO06 - Weigh-In-Motion

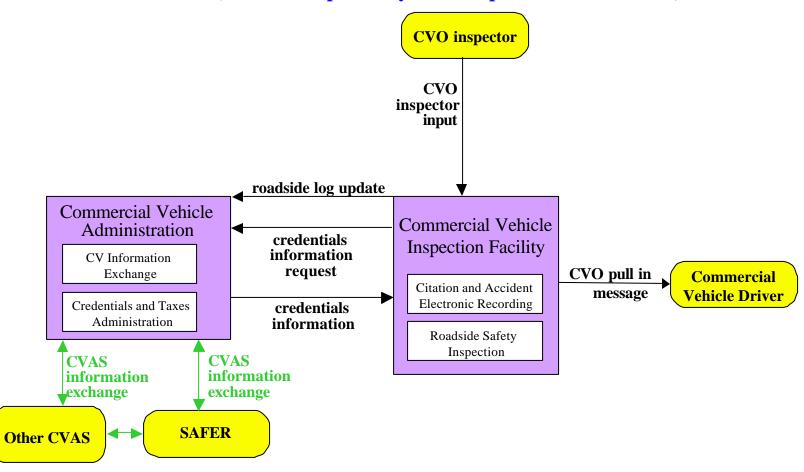


Note: This market package describes high-speed weigh-in-motion that is implemented in conjunction with electronic screening. It does not include low-speed ramp weigh-in-motion.

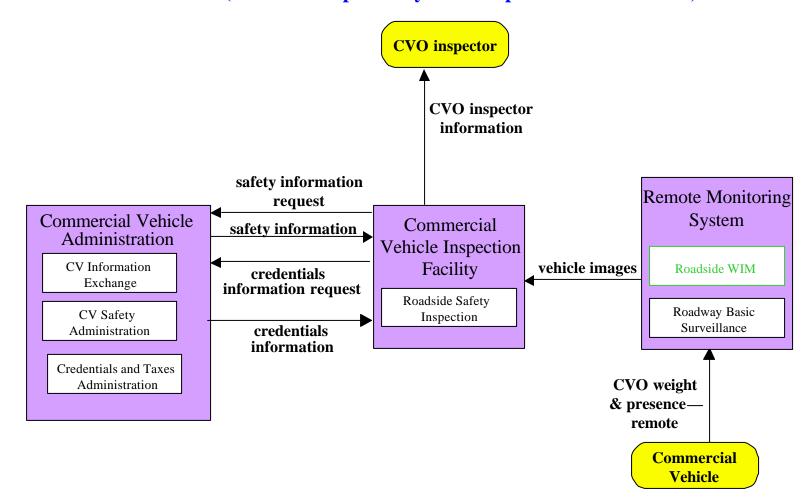
CVO07 - Roadside CVO Safety



CVO11(KY) - Roadside CVO Credentials Checks (this should probably be incorporated into CVO04)



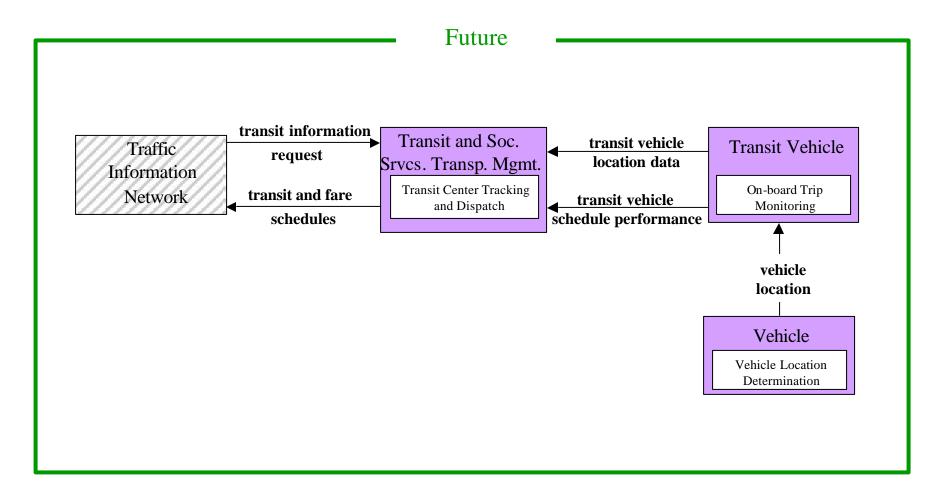
CVO12(KY) - CVO Remote Monitoring (This should probably be incorporated into CVO07)



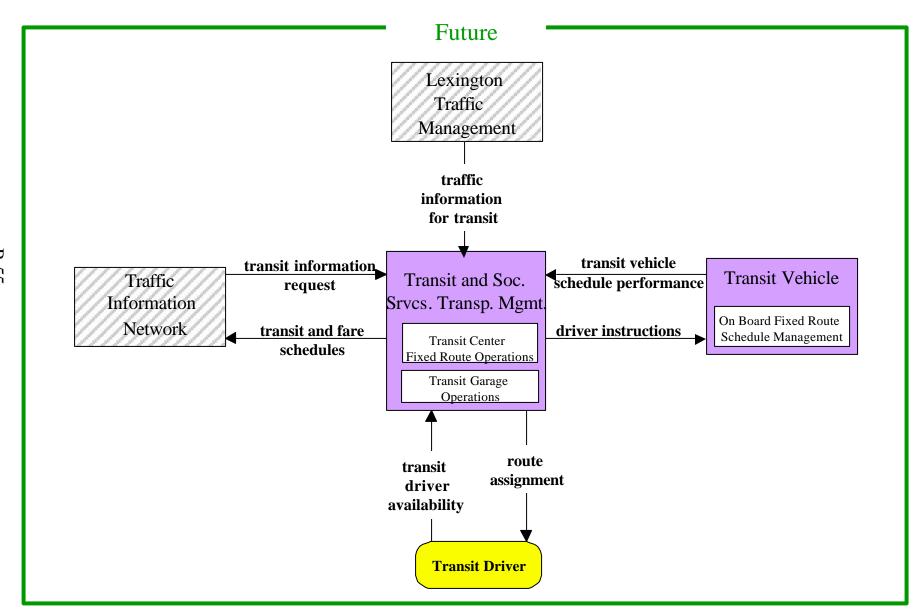
Market Package Diagrams: Lexington

For the Kentucky Statewide ITS Architecture: 8/16/01

APTS1 - Transit Vehicle Tracking

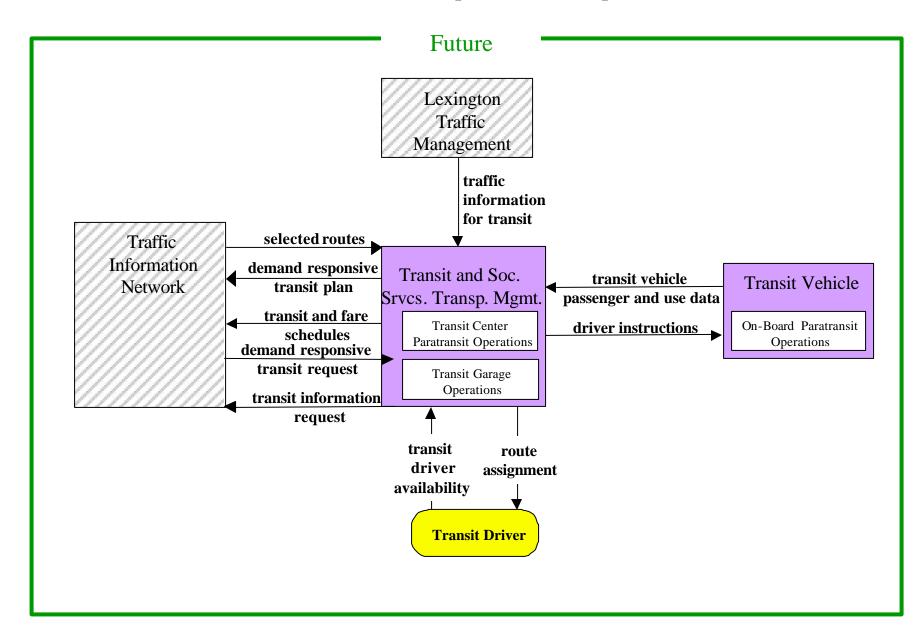


APTS2 - Transit Fixed-Route Operations



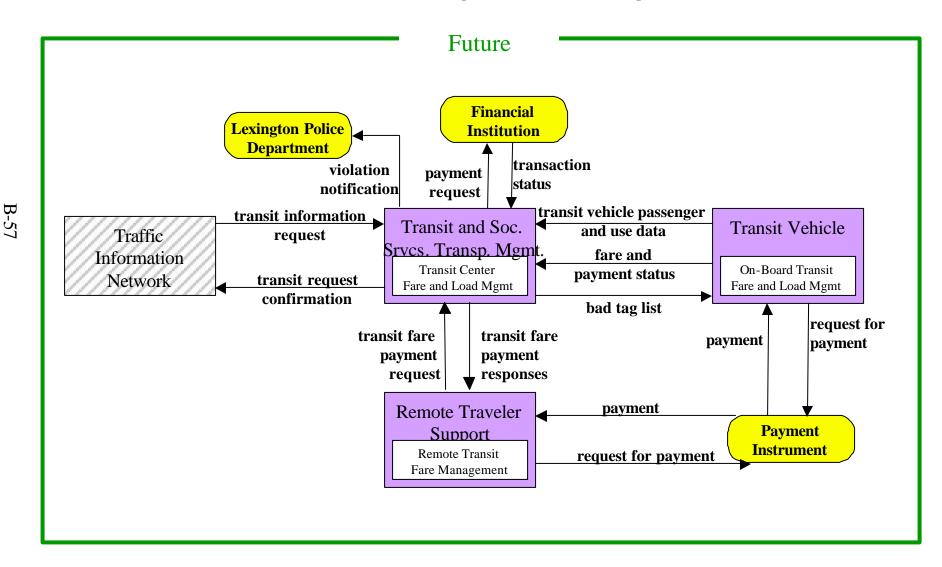
ひしい

APTS3 - Demand Response Transit Operations

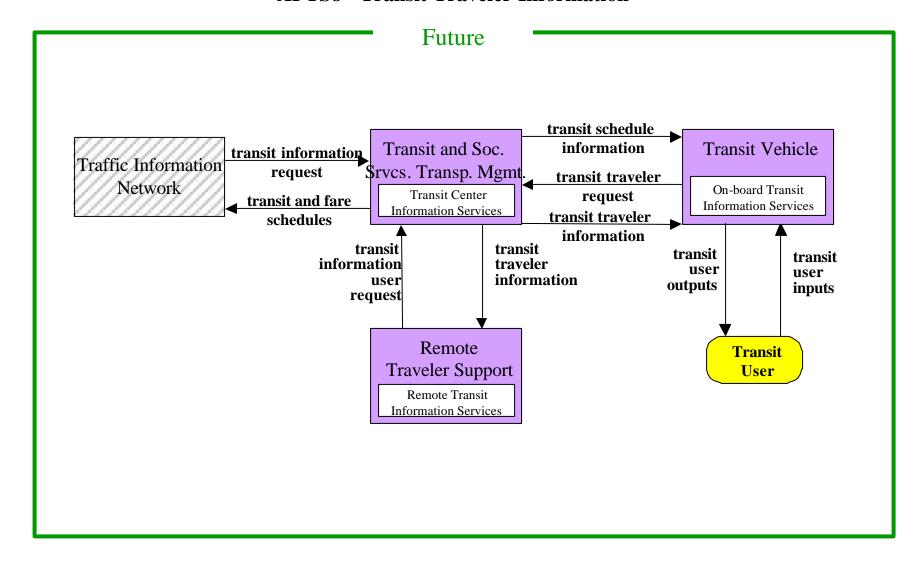


B-56

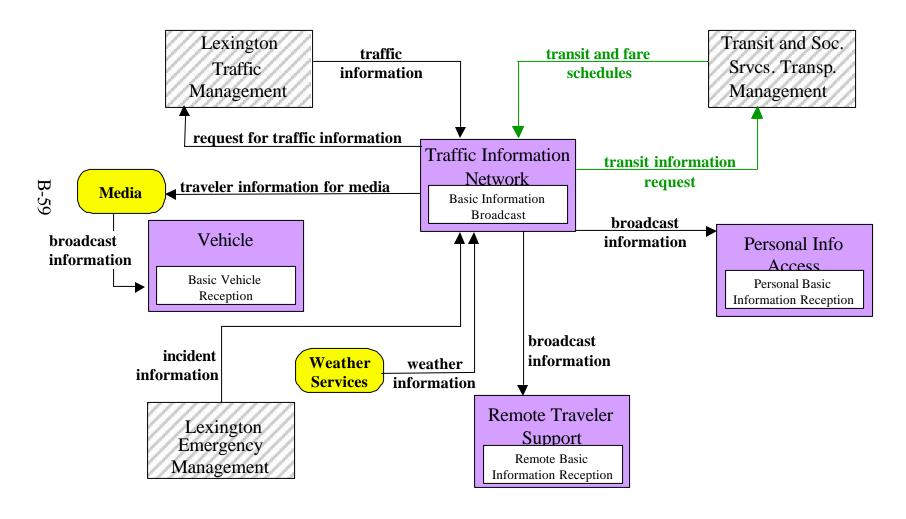
APTS4 Transit Passenger and Fare Management



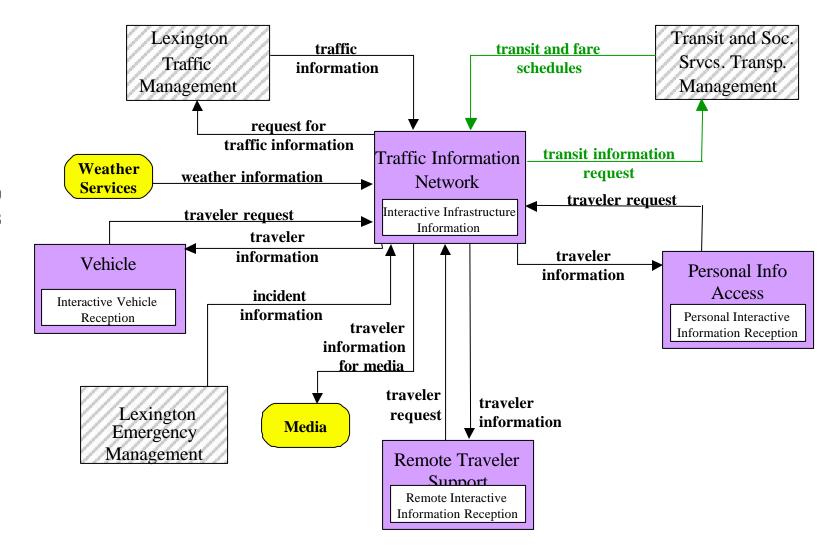
APTS8 - Transit Traveler Information



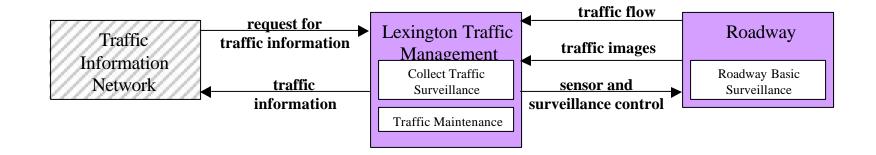
ATIS1 - Broadcast Traveler Information



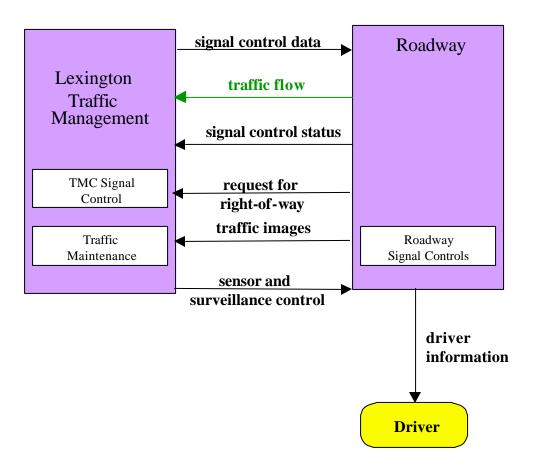
ATIS2 - Interactive Traveler Information



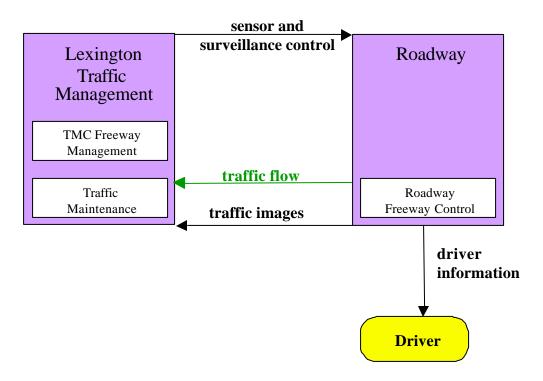
ATMS1 - Network Surveillance



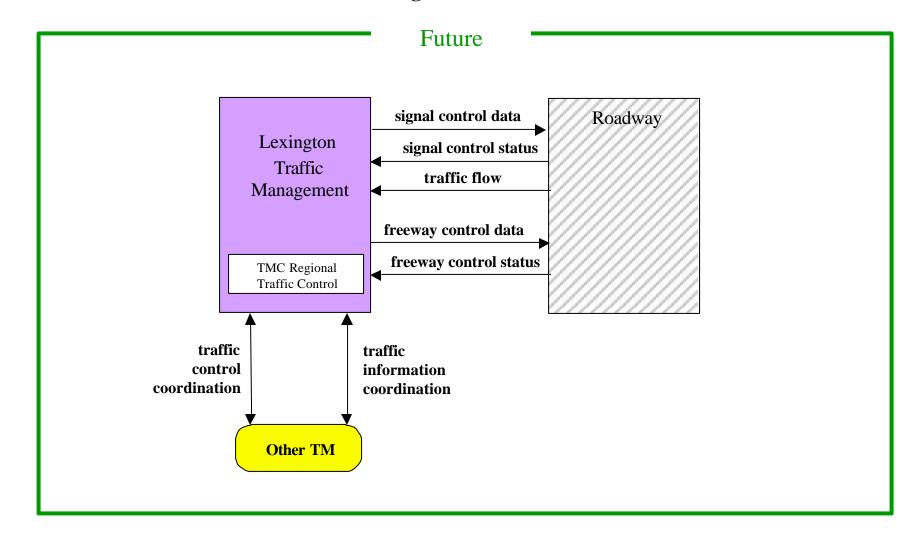
ATMS3 - Surface Street Control



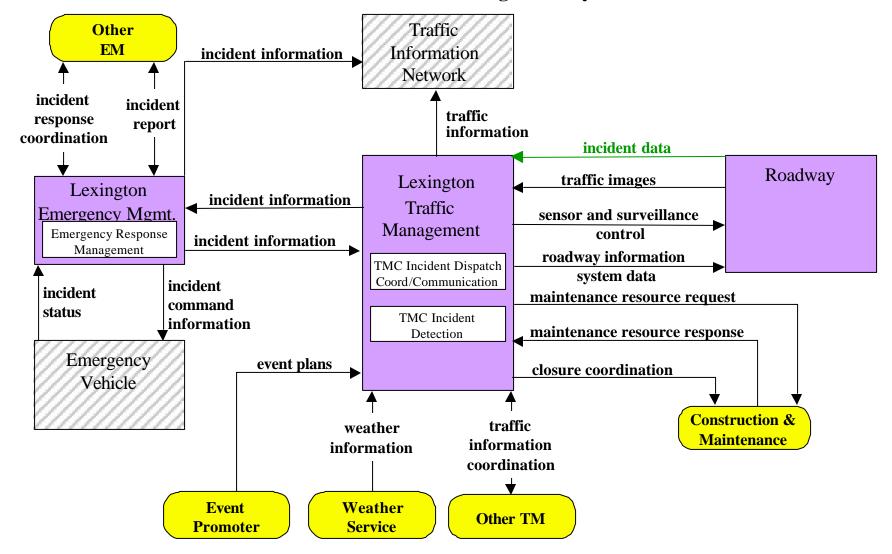
ATMS4 - Freeway Control



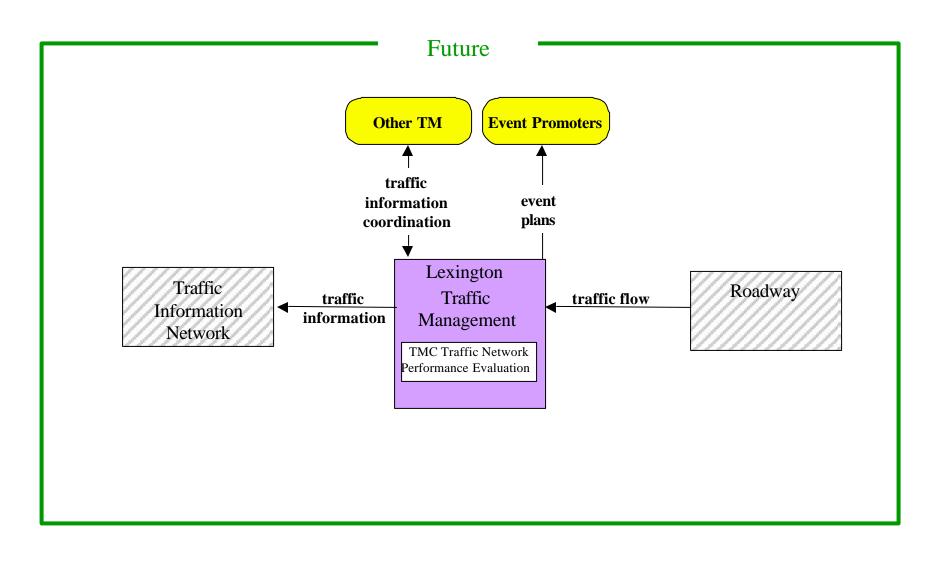
ATMS7 - Regional Traffic Control



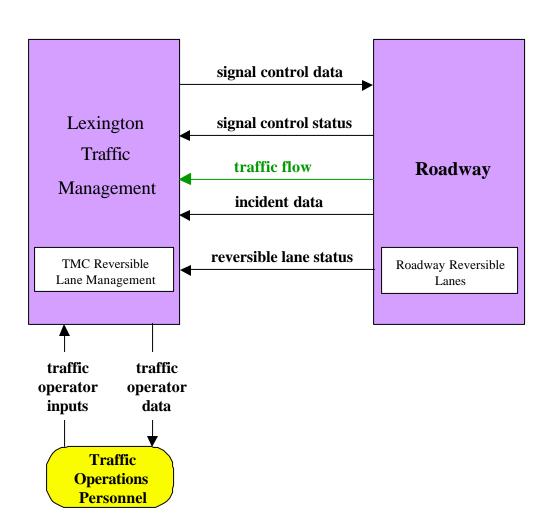
ATMS8 - Incident Management System



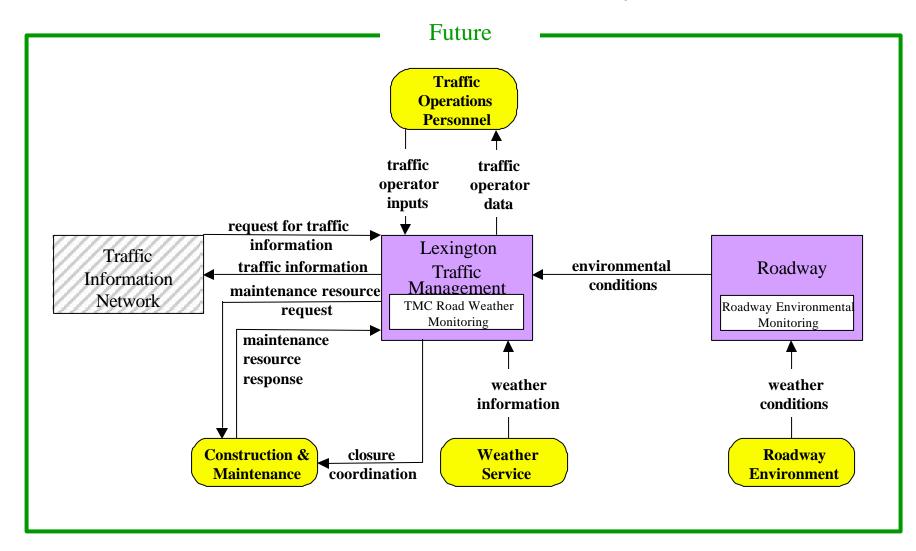
ATMS9 - Traffic Forecast and Demand Management



ATMS17 - Reversible Lane Management

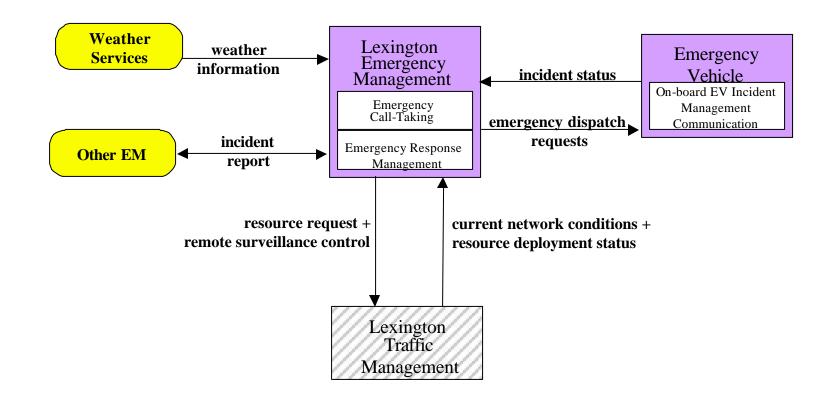


ATMS18 - Road Weather Information System



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EM1 - Emergency Response

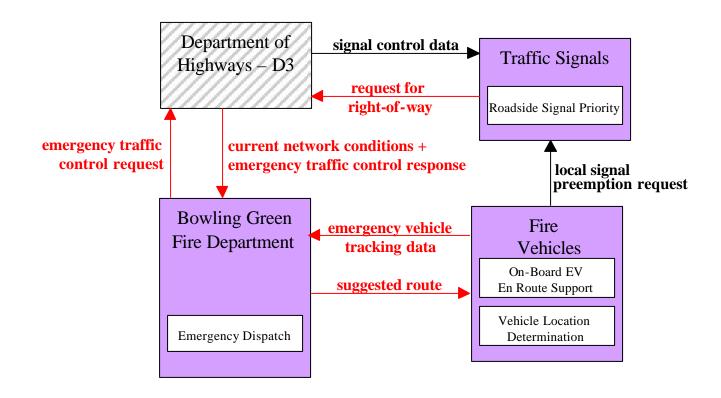


Market Package Diagrams: Signal Preemption

For the Kentucky Statewide ITS Architecture: Jan-Sep 2001

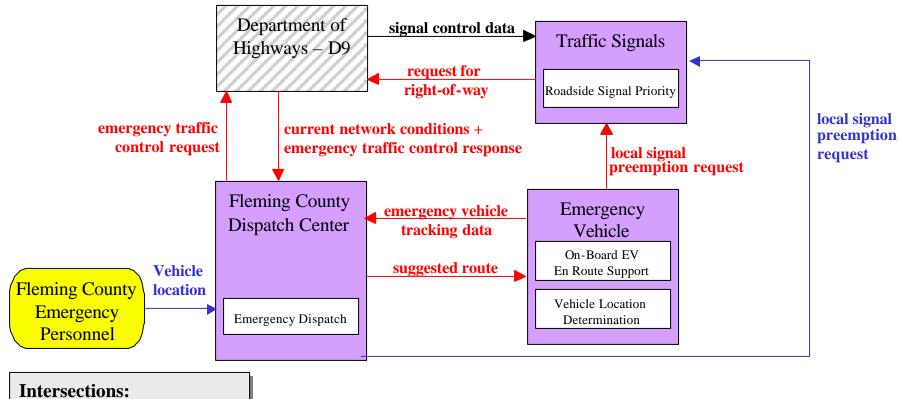
Bowling Green

EM2 - Emergency Routing



Flemingsburg

EM2 - Emergency Routing

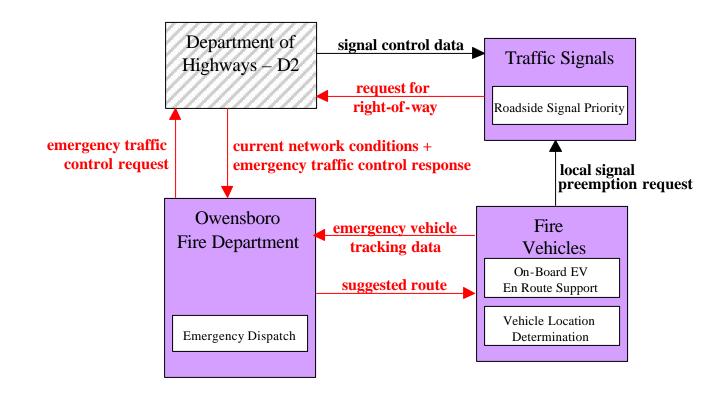


KY11 & KY32/KY57

KY32 & KY11/KY559

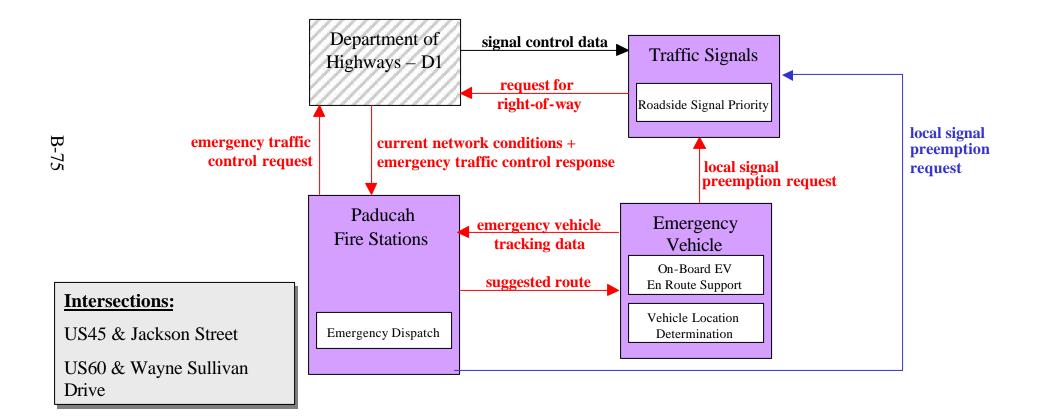
Owensboro

EM2 - Emergency Routing



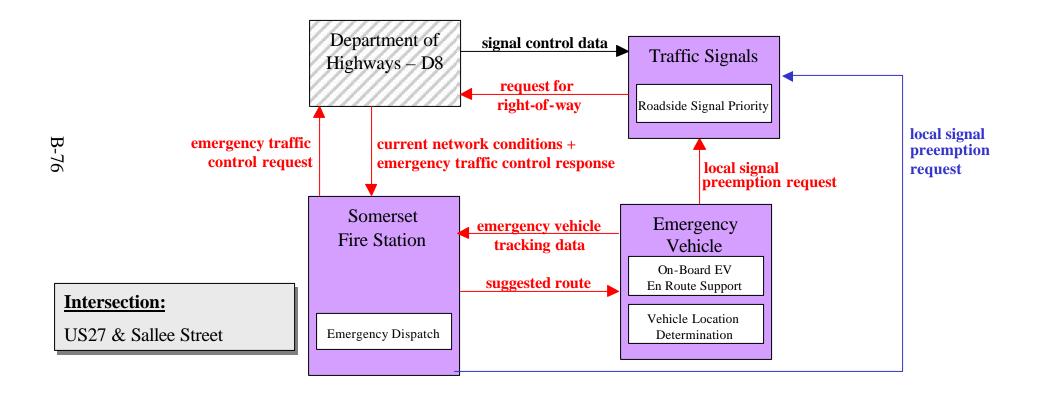
Paducah

EM2 - Emergency Routing



Pulaski County

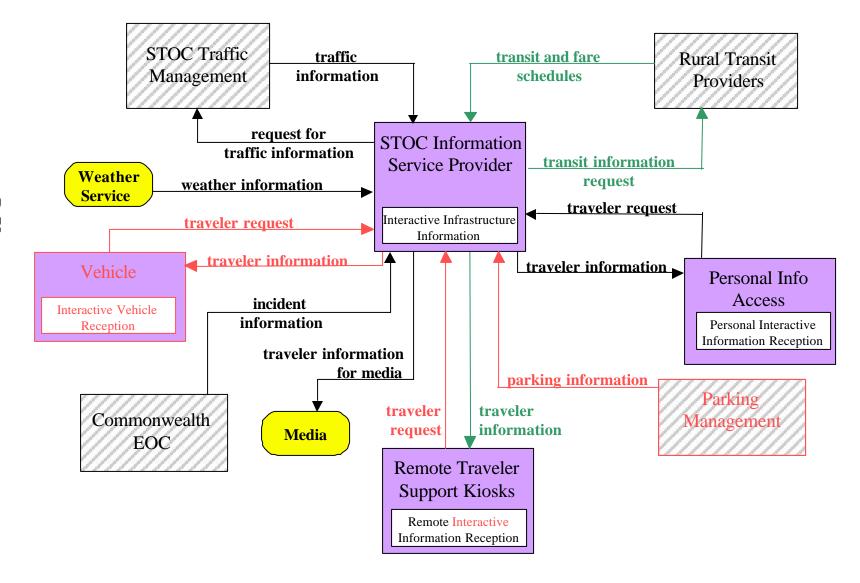
EM2 - Emergency Routing



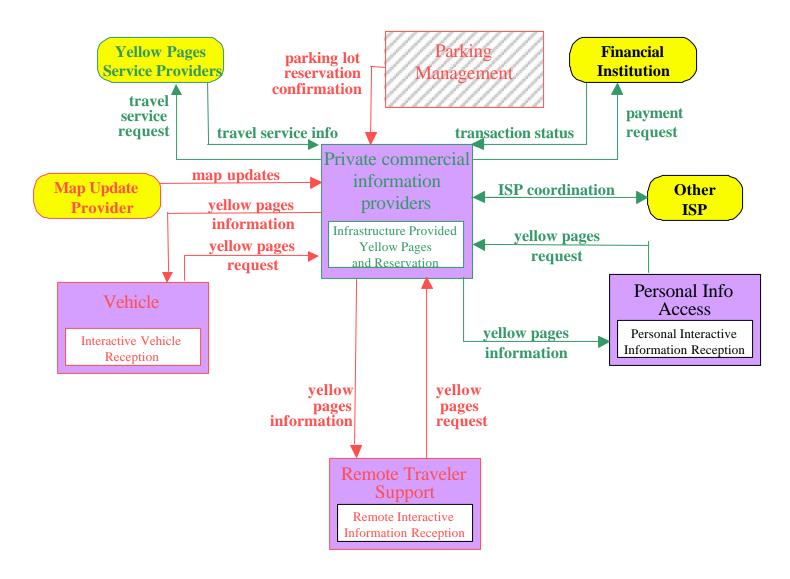
Market Package Diagrams: Statewide Transportation Operations Center (STOC)

Kentucky Statewide ITS Architecture: 8/23/00

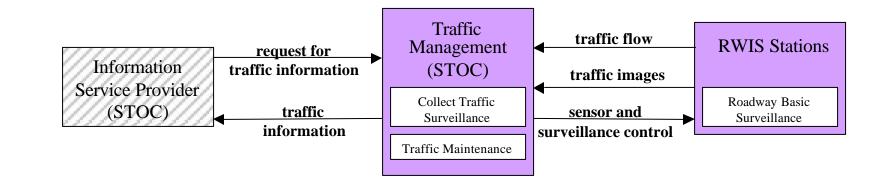
ATIS2 - Interactive Traveler Information



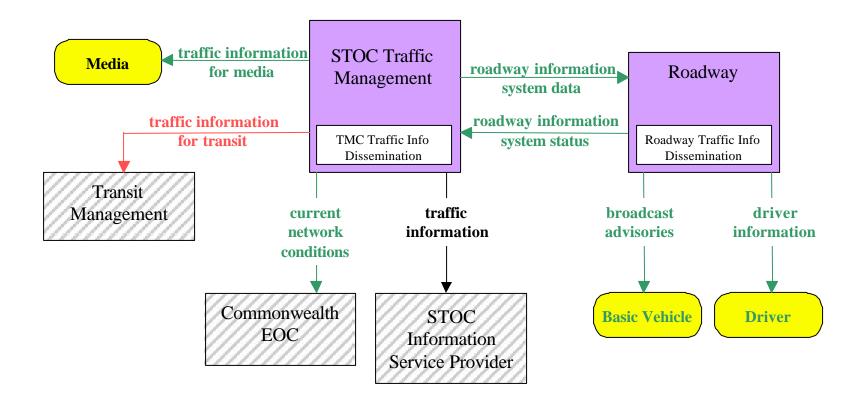
ATIS7 - Yellow Pages and Reservation



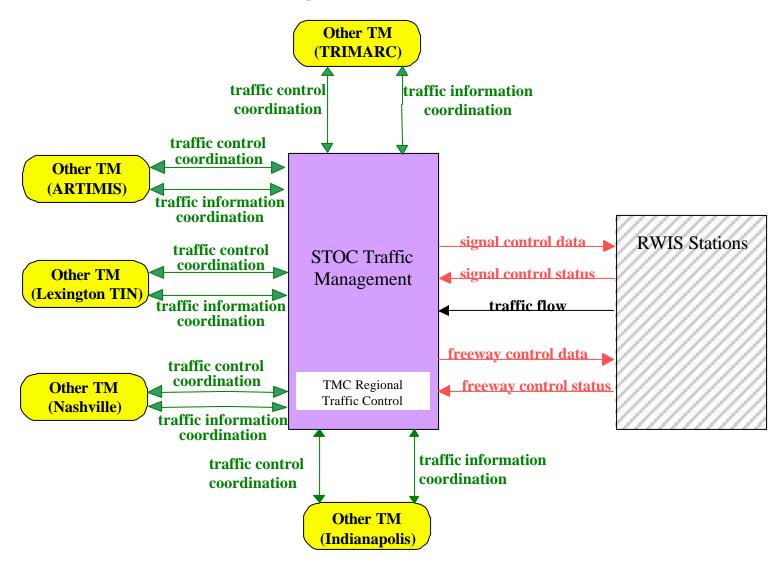
ATMS01 - Network Surveillance

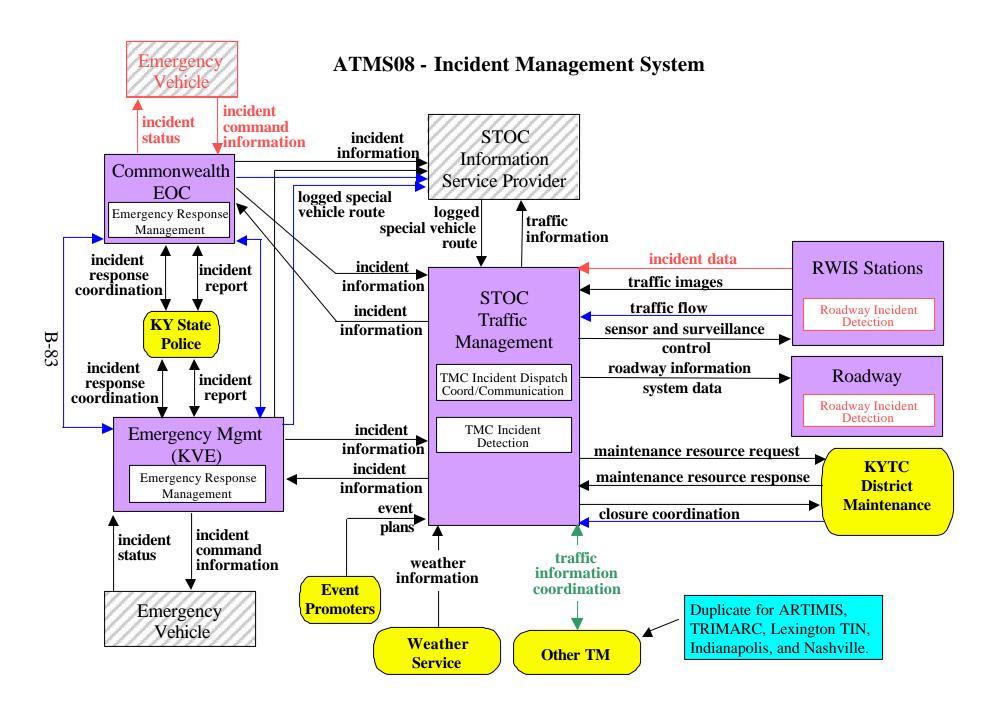


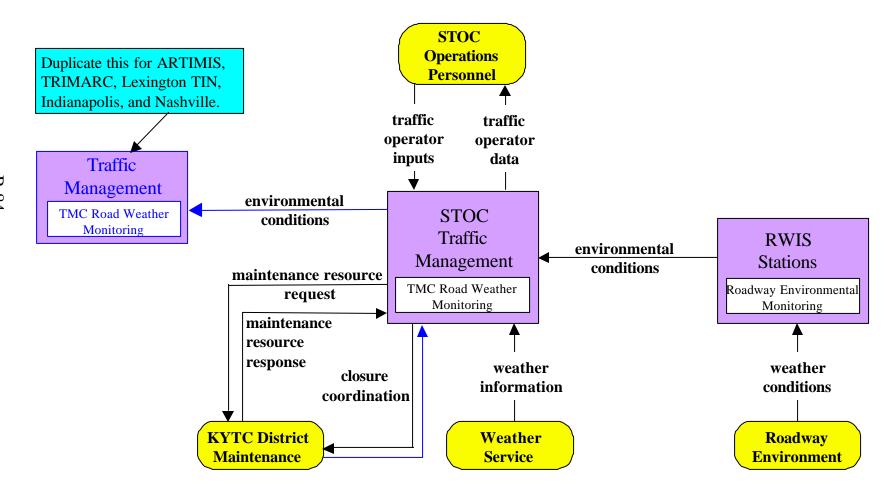
ATMS06 Traffic Information Dissemination



ATMS07 - Regional Traffic Control

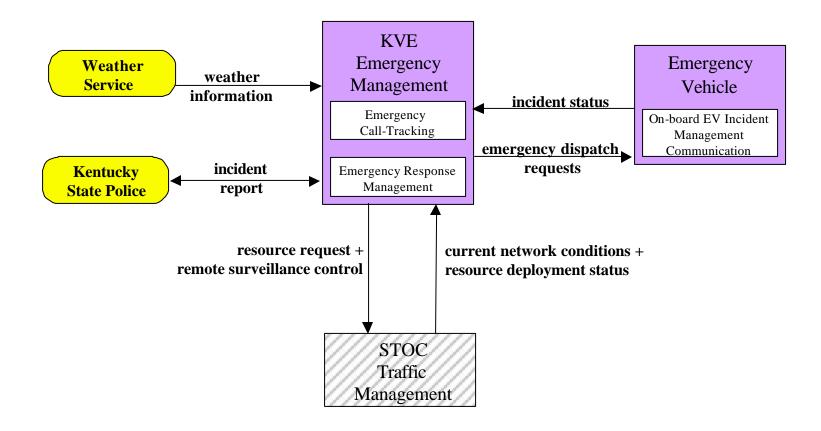






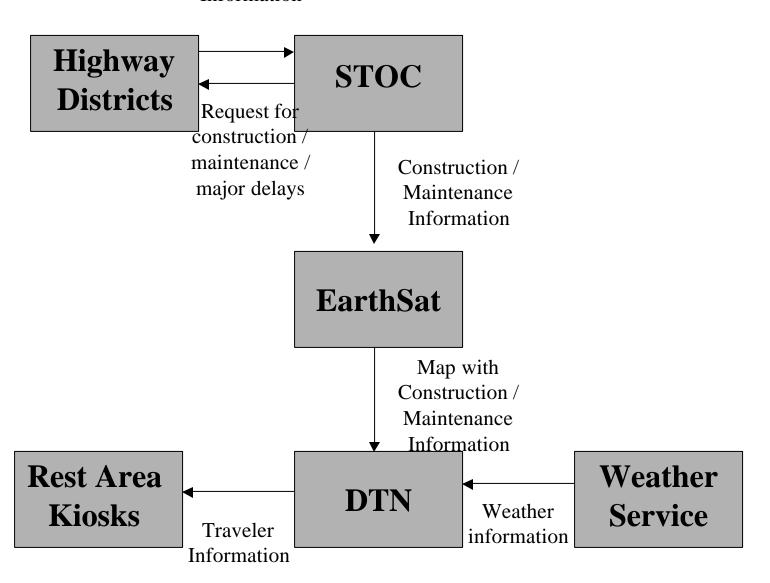
B-84

EM1 - Emergency Response



Construction /
Maintenance
Information

Rest Area Traveler Information System

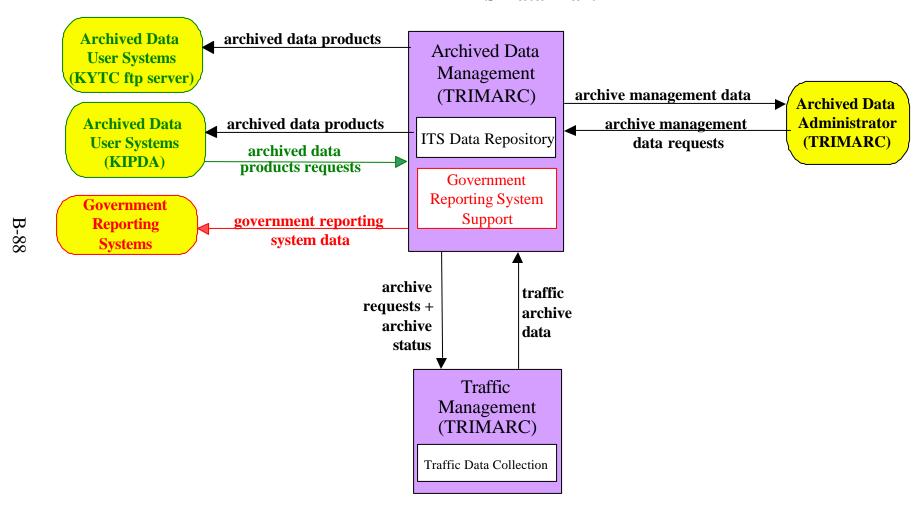


Market Package Diagrams: TRIMARC

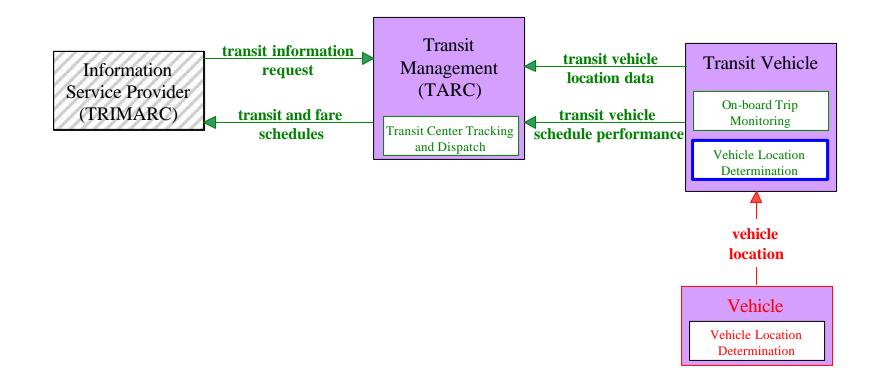
Kentucky Statewide ITS

Architecture: 12/11/00

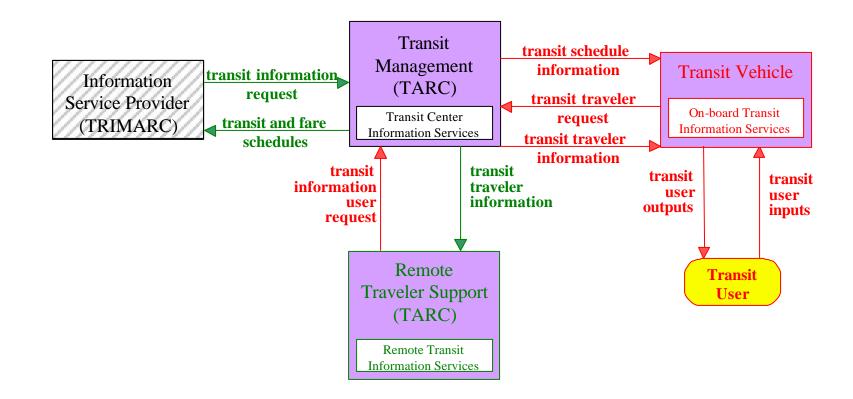
AD1 - ITS Data Mart



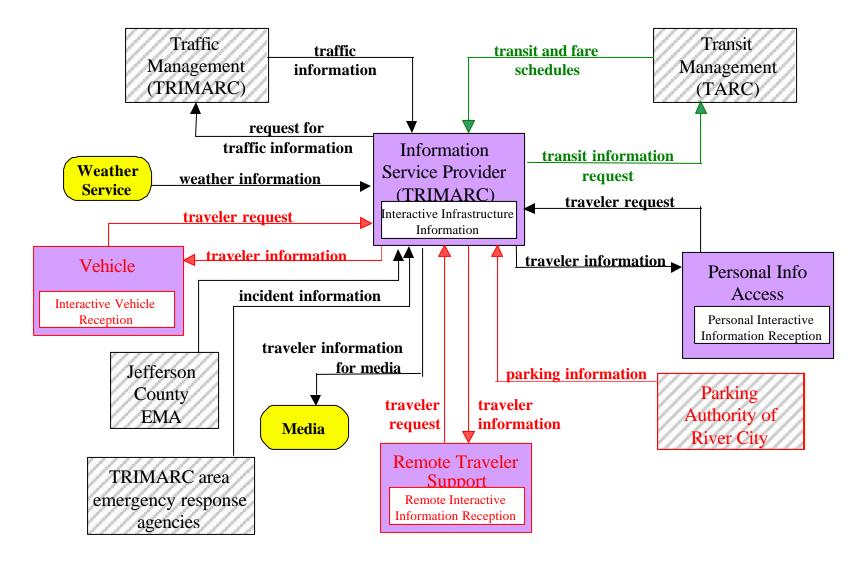
APTS1 - Transit Vehicle Tracking



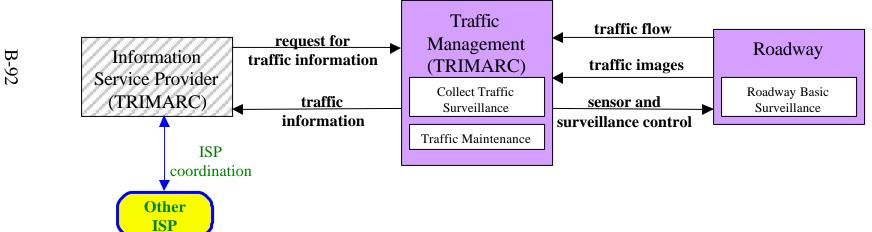
APTS8 - Transit Traveler Information



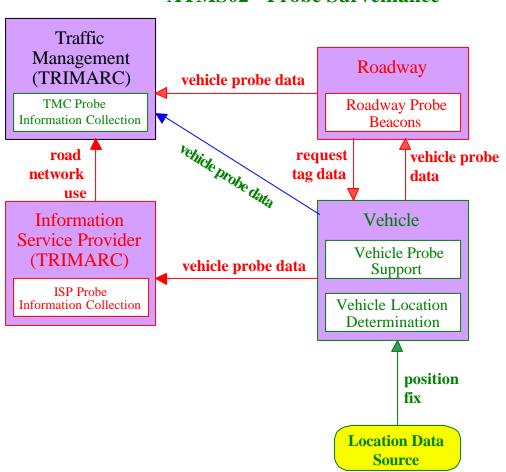
ATIS2 - Interactive Traveler Information



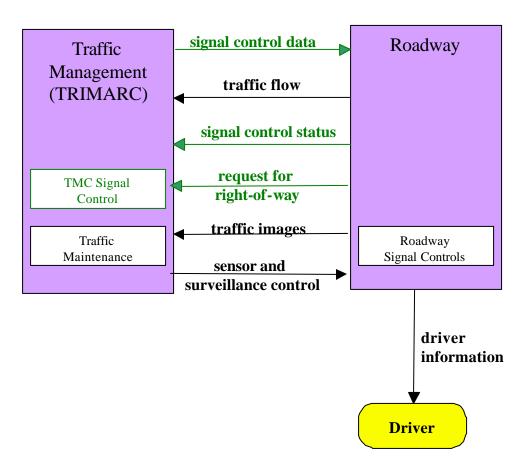
ATMS01 - Network Surveillance



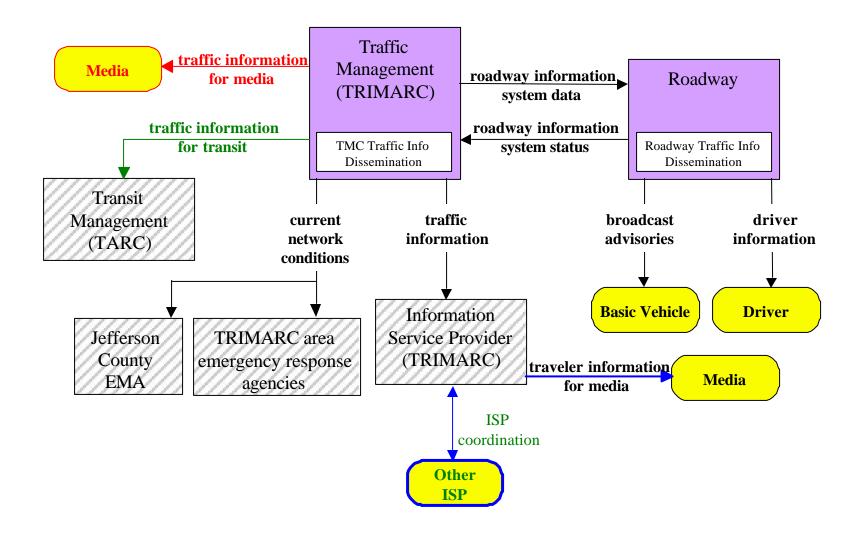
ATMS02 - Probe Surveillance

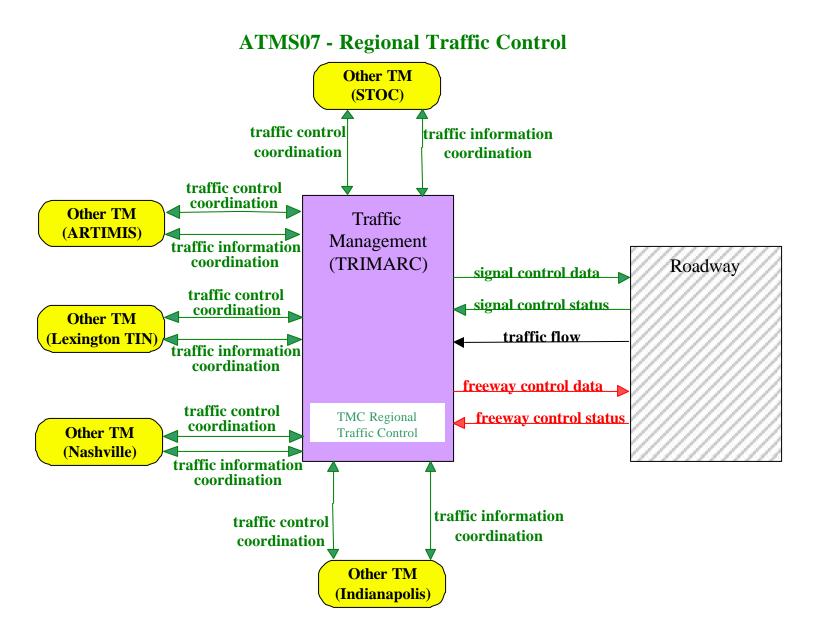


ATMS03 - Surface Street Control



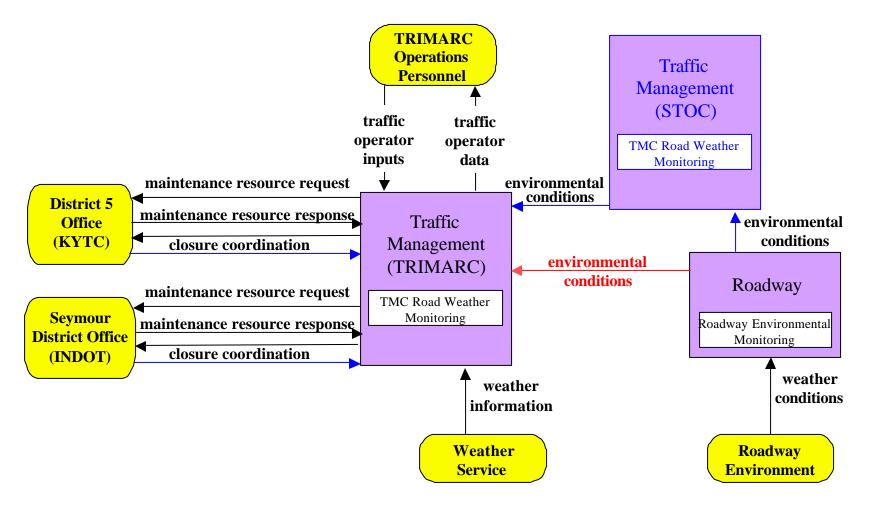
ATMS06 Traffic Information Dissemination



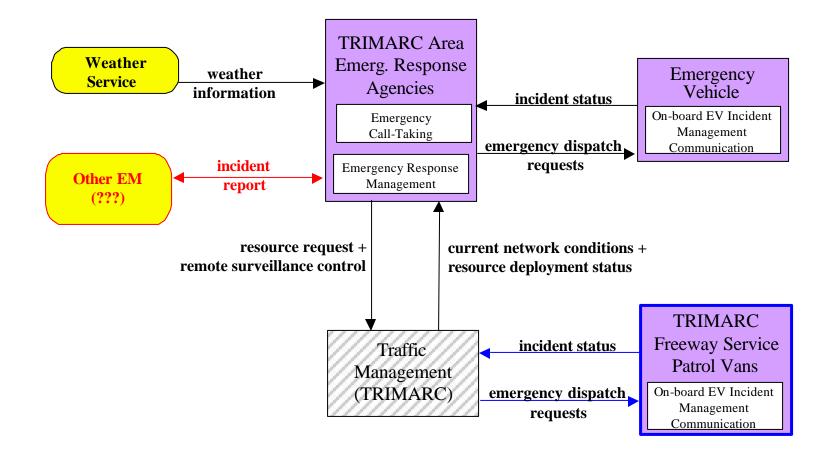


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ATMS18 - Road Weather Information System



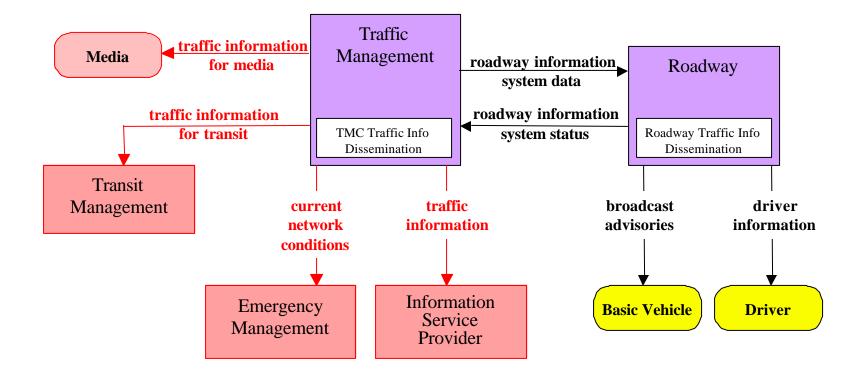
EM1 - Emergency Response



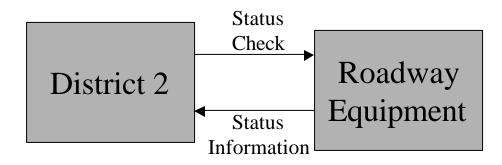
Market Package Diagrams: Truck Rollover Warning

For the Kentucky Statewide ITS Architecture: 2/27/02

ATMS06 Traffic Information Dissemination



System Diagram



Phone line is used to communicate with system (diagnostic/status check info only)

- 2 Acoustic Detectors (Mounted overhead on poles, very simple technology)
- 2 EIS wide beam radar detectors mounted to the side of the poles (not on the arm)
- Fiber Optic Message Sign "Trucks Reduce Speed"

After reaching a specific threshold (based on length and speed determined by detectors), the sign is activated